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Bibliography of School Buildings, Grounds, and Equipment

Part III

By

HENRY LESTER SMITH

and

FOREST RUBY NOFFSINGER

Bureau of Coöperative Research, Indiana University
School of Education

HENRY LESTER SMITH, Director

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The contents of this issue are listed in the following:

Loyola Digest

Wilson Education Index

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Published by the
BUREAU OF COÖPERATIVE RESEARCH
Indiana University

Foreword

In January, 1928, the Bureau of Coöperative Research published (as Vol. 4, No. 3, of the Bulletin of the School of Education, Indiana University) a comprehensive Bibliography of School Buildings, Grounds, and Equipment, under the authorship of Henry Lester Smith and Leo M. Chamberlain. This bibliography, which included only references previous to October, 1927, has been continued to include references from October, 1927, to April, 1932. However, the extent of the work has been such that it was thought necessary to publish the additional references in two bulletins—the first (Vol. 9, No. 2, of the Bulletin of the School of Education, Indiana University) containing references falling in the fields covered by the first eleven main divisions of the original bibliography, and the second (Vol. 9, No. 3) containing references in the fields covered by the last eleven main divisions. The three bulletins are to be known as Parts I, II, and III of "A Bibliography of School Buildings, Grounds, and Equipment," the original study being Part I and the present study being Parts II and III. The three parts should be used together, as there is no overlapping of references.

As was indicated with respect to the former bulletin, this publication is in no sense presented as an exhaustive bibliography on school buildings, grounds, and equipment. The sources in this field are practically unlimited and are increasing with each month's publications. It is almost inconceivable that any single institution should have available all the various books, periodicals, and bulletins providing information in the field. In an attempt to make the bibliography as complete as possible, a number of references have been compiled from such sources as the *Education Index* and the Office of Education publications and included in the bibliography, even tho the original references were not available either for checking or annotation. The possibility of inaccuracies thru this practice was thought to be overbalanced by the increased usefulness of the bibliography because of the inclusion of references which otherwise would have been omitted.

In collecting the references published during the period covered by this bibliography, a large number of earlier articles not published in the former bulletin were discovered. To these references were added about nine hundred references dated before 1927 which were taken from a typewritten bibliography lent to the authors by Dr. N. L. Engelhardt, Teachers College, Columbia University. These earlier references (about 2,000 in number) are on file at the Bureau of Coöperative Research, School of Education, Indiana University. This card file bibliography, together with the three published bulletins of the School of Education on the subject, is thought to be the most comprehensive bibliography on school buildings, grounds, and equipment in existence.

In any publication containing so many references there are certain to be some errors. The authors will greatly appreciate the coöperation of those who use this bibliography in reporting whatever mistakes and inaccuracies are discovered.

Acknowledgment is here made for the help provided by others in the collecting, annotating, and editing of the material included in this study. Of special value has been the assistance of several graduate students in locating references on specific building units. The authors wish to commend the library staff of Indiana University for their helpful coöperation in locating and making available the materials needed in the conduct of the study. To Miss Kathleen Dugdale, stenographer in charge of publications, and her able assistant, Miss Mary Carroll, should be given credit for much of the checking and editing of this publication.

HENRY LESTER SMITH.
FOREST R. NOFFSINGER.

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Introduction

RELATION TO FORMER BIBLIOGRAPHY

THIS bibliography is published in three parts. The Smith-Chamberlain bibliography is to be known as Part I. Part II (Vol. 9, No. 2) includes the following major divisions as listed in the Table of Contents of Part I: I, General References; II, Historical Development and Modern Characteristics of American School Architecture; III, Architectural Styles and Building Types; IV, The Building Shortage and the Status of Building Operations; V, Preliminary Considerations and the Development of the Building Program; VI, Individual Relationships and Responsibilities; VII, School Codes and Other Legal Provisions Affecting the Building Program; VIII, Building Materials, Specifications, and Structural Design; IX, Acoustics; X, The School Grounds; and XI, Space Provisions and their Layout and Equipment. Part III (Vol. 9, No. 3) includes the following major divisions: XII, Mechanical Equipment; XIII, Interior Decoration; XIV, Standardization of School Buildings and Equipment; XV, Remodeled Buildings and Additions; XVI, The Maintenance of Buildings and Equipment; XVII, Insurance and Depreciation; XVIII, The Teacher's Home; XIX, Open-Air Schools; XX, The Portable Schoolhouse; XXI, Schoolhouses of Other Countries; and XXII, Plans, Illustrations, and Descriptions of Existing, Proposed, and Model School Buildings, Classified by States.

Because of recent developments in certain phases of the planning and construction of school buildings, a number of new sub-divisions have been added to the original Table of Contents of Part I.

The numbering of references begins with No. 2264 (the last number used in Part I being No. 2263) and continues consecutively thru Part II and Part III. The two parts of the new bibliography are organized to be used as a single unit; and the cross-indexes and index of authors include references in all three publications.

SCOPE OF THE BIBLIOGRAPHY

1. References included in Part I cover material in the field previous to October, 1927; those in Part II and Part III are limited to the period beginning October 1, 1927, and ending April 1, 1932.

2. School surveys not included in reference No. 2442, *Bibliography of School Surveys and of References on School Surveys*, by Henry Lester Smith and Edgar Alvin O'Dell (Vol. 8, Nos. 1 and 2, of the Bulletin of the School of Education, Indiana University) have been included in this bibliography when the date of publication fell within the period covered by this study.

3. Advertising material has been given a place when considered to be of general significance.

4. References dealing with private educational institutions of the elementary and secondary level are included in this bibliography. References dealing with institutions of higher learning have been excluded except where such references deal also with elementary or secondary school provisions or where there is possible an application of principles or practices to elementary or secondary school buildings. It is planned to publish, in the near future, a bibliography of references on buildings for institutions of higher learning.

5. Publications of city boards of education, state departments of education, and schoolhousing bureaus have been included when available, even tho their nature was considered such as to make them of local rather than general importance.

ORGANIZATION

All references have been placed within the classification developed in Part I with the exception of a few newly developed sub-topics. The decision as to the proper classification of a particular reference was in many cases very difficult to make. In all such cases the reference was originally listed under the topic receiving the greatest emphasis in the reference and given secondary reference in the cross-index of all other topics treated in the reference. The following statements will be of assistance to the user of this bibliography:

1. All references are numbered consecutively thruout Parts I, II, and III without regard for the divisions of the bibliography.

2. In so far as possible, duplications have been avoided. Each reference should appear once and once only. Any single number stands for one and the same reference in all three bulletins.

3. Wherever the same material or practically the same material was found to have been published in two or more periodicals, bulletins, or other publications, the reference is listed but once and notation is made of the various publications of the same material.

4. Where there was found a series of articles having the same or slightly different titles by the same author, the entire series is included under a single reference number.

5. References of a general nature are classified under one of the twenty-two major headings, and all others appear under the minor divisions for which they seemed to have most significance.

6. A few of the more significant references in each division have been marked with an asterisk.

7. Within each division the references have been arranged alphabetically according to author. Where the author is not indicated, the reference is assigned to the magazine in which it appears. Where more than one reference by the same author is found under any division, the references are arranged in chronological order.

8. At the close of each division appears a series of cross-index numbers. These numbers refer the reader to references on the same subject which are listed in other divisions of the three bulletins which make up the complete bibliography. This device aids the student in locating all the material pertaining to the subject under investigation.

9. Bibliographical data for magazine articles appear in the following order:

Author (or magazine), name of article, magazine, volume number, pages, month, day of month (if used), and year.

10. Bibliographical data for books appear in the following order:

Author, title of book, publisher, place of publication, date of publication. Where a section of a book is considered alone, the title of this section follows the name of the author and precedes the title of the book.

11. Bulletins, reports, and like material have been made to conform as closely as possible to this system. Uniformity has been attempted thruout.

12. At the close of Part II and of Part III appears an alphabetical list of authors of all references listed in Parts I, II, and III of the bibliography.

13. Abbreviations employed in Parts II and III are explained in the following section of this bulletin. Abbreviations used in Part I are explained in that bulletin.

14. The authors take no responsibility for references lacking annotations. Such references were not available and the task of checking and annotating them seemed to be too great to justify the required time and money expense.

15. References in Division XXII in Part III have been listed alphabetically by states with the idea of providing a source for the study of plans and illustrations of buildings typical of particular sections of the country or of enabling the reader to locate the description of a particular school building. In some cases the description of a particular building seemed to provide important information on some building unit or other sub-division. Under such circumstances the reference was originally listed under the appropriate topic and given a cross-index reference under the proper state.

SUGGESTIONS FOR USING THE BIBLIOGRAPHY

1. The student interested in school buildings should have access to all three parts of the bibliography. Part I lists the important references previous to October 1, 1927. Parts II and III list the references from that date to April 1, 1932.

2. The reader interested in a survey of the whole field should select for study the references that are marked with an asterisk in Division I of Part I and in Division I of Part II.

3. The individual interested in a particular subject, but whose time is limited, should consult those references under the proper division in each bibliography which are marked with an asterisk, and as many additional ones as he deems desirable.

4. For a thoro study of a particular division or sub-division of the work, the reader should consult all references listed under the proper heading in both bibliographies and, in addition, all the cross-index references under the division or sub-division.

5. Where the reader is interested in a minor detail which has not been given a place in the Table of Contents, he should determine the division in the Table of Contents under which the topic logically falls and select thru the title of the reference on the annotation those references for further investigation which promise treatment of the chosen topic. No topic index other than the Table of Contents has been included because the task of compiling such an index, adequate for student use, was considered not within the scope of the present study.

List of Abbreviations Used

ABBREVIATIONS AND PUBLISHERS OF PERIODICALS

Aerologist. The Aerologist Publishing Co., 64 W. Randolph St., Chicago.

Am Arch—American Architect. Architectural and Building Press, Inc., 239 W. Thirty-Ninth St., New York City.

Am Childh—American Childhood. Milton Bradley Co., Springfield, Mass.

Am City—American City. Civic Press, 443 Fourth Ave., New York City.

Am Educ Digest—American Educational Digest. (See School Executives Magazine.)

Am Inst Arch J—Journal of the American Institute of Architects. Press of the American Institute of Architects, Inc., Fisk Bldg., 250 W. Fifty-Seventh St., New York City.

Am J Hygiene—American Journal of Hygiene. School of Hygiene and Public Health, Lancaster, Pa.

Am J Pub Health—American Journal of Public Health. (Incorporated Nation's Health in 1928.) American Public Health Association, 374 Broadway, Albany, N.Y.

Am J Sociology—American Journal of Sociology. University of Chicago Press, 5750 Ellis Ave., Chicago.

Am Medical Assn J—Journal of the American Medical Association. American Medical Association, 535 N. Dearborn St., Chicago.

Am Mercury—American Mercury. American Mercury, Inc., 730 Fifth Ave., New York City.

Am Phys Educ R—American Physical Education Review. American Physical Education Association, Box 123, Highland Station, Springfield, Mass.

Am Sch and Univ—The American School and University. American School Publishing Corp., 443 Fourth Ave., New York City.

Am Sch Bd J—American School Board Journal. Bruce Publishing Co., 354 Milwaukee St., Milwaukee, Wis.

Am Soc Heat V E J—Journal of the American Society of Heating and Ventilating Engineers. (See Heating, Piping, and Air Conditioning.)

Arch—Architecture. Charles Scribner's Sons, 597 Fifth Ave., New York City.

Arch Forum—Architectural Forum. Rogers and Manson Co., 383 Madison Ave., New York City.

Arch R—Architectural Review. The Architectural Press, 9 Queen Anne's Gate, Westminster, England.

Arch Rec—Architectural Record. F. W. Dodge Corp., 119 W. Fortieth St., New York City.

Athletic J—The Athletic Journal. Athletic Journal Publishing Co., 6858 Glenwood Ave., Chicago.

Balance Sheet—The Balance Sheet. Southwestern Publishing Co., Cincinnati, Ohio.

Baltimore Bul Educ—Baltimore Bulletin of Education. Bureau of Research, Carrollton and Lafayette Aves., Baltimore, Md.

Bathhouse and Beach Management.

Beach and Pool. (See Beach and Pool and Aquatics.)

Beach and Pool and Aquatics. (Known as Beach and Pool previous to February, 1931.) Chicago.

Bldg Age—Building Age and National Builder. Building Age Publishing Corp., 243 W. Thirty-Ninth St., New York City.

Boston Soc of Civil Eng J—Journal of the Boston Society of Civil Engineers. Boston.

Bruce's Sch Shop Annual—Bruce's School Shop Annual. (Known as Bruce's Specification Annual in 1928 and 1929.) Bruce Publishing Co., Milwaukee, Wis.

Bul H Points—Bulletin of High Points in the Work of the High Schools of New York City. Board of Education, Office of Publication, Room 821, Hall of the Board of Education, 500 Park Ave., New York City.

Bul of Dept of Classroom Teach of the N.E.A.—Bulletin of the Department of Classroom Teachers of the National Education Association. National Education Association, 1201 Sixteenth St., N.W., Washington, D.C.

Bul of Dept of El Sch Prin of the N.E.A.—Bulletin of the Department of Elementary School Principals of the National Education Association. National Education Association, 1201 Sixteenth St., N.W., Washington, D.C.

Bul of Dept of Sec-Sch Prin of the N.E.A.—Bulletin of the Department of Secondary-School Principals of the National Education Association. National Education Association, 3129 Wenonah Ave., Berwyn, Ill.

Bul of Dept of Supt of the N.E.A.—Bulletin of the Department of Superintendence of the National Education Association. National Education Association, 1201 Sixteenth St., N.W., Washington, D.C.

Bul of the Stout Inst—Bulletin of the Stout Institute. Stout Institute, Menomonie, Wis.

Calif Q Sec Educ—California Quarterly of Secondary Education. The California Society for the Study of Secondary Education, 2163 Center St., Berkeley, Calif.

Catholic Sch J—Catholic School Journal. Milwaukee, Wis.

Chicago Prin Club Bul—Bulletin of the Chicago Principals' Club. Chicago.

Chicago Sch J—Chicago Schools Journal. Chicago Normal College, 6800 Stewart Ave., Chicago.

Childh Educ—Childhood Education. Association for Childhood Education, 1201 Sixteenth St., N.W., Washington, D.C.

Col and Ref Library Yearbook—College and Reference Library Yearbook. American Library Association, 78 E. Washington St., Chicago.

Conn Sch—Connecticut Schools. Hartford, Conn.

Domestic Eng—Domestic Engineering. Engineering Publications, Inc., 1900 Prairie Ave., Chicago.
Drama—Drama Magazine. Drama Corp., 15 W. Forty-Fourth St., New York City.

Educ Adm and Sup—Educational Administration and Supervision. Warwick and York, York, Pa.
Educ Bul—Education Bulletin. State of New Jersey, Department of Public Instruction, Trenton, N.J.
Educ Meth—Educational Method. Department of Supervisors and Directors of Instruction, National Education Association, 525 W. One Hundred Twentieth St., New York City.
Educ News—Educational News. State Department of Education, Charleston, W.Va.
Educ R—Educational Review. (See School and Society.)
Educ Res Bul—Educational Research Bulletin. College of Education, Ohio State University, Columbus, Ohio.
Educ Res Rec—Educational Research Record. Extension Division, University of Nebraska, Lincoln, Neb.
Elec R—Electrical Review. London, England.
Electrician. Benn Bros., Ltd., Bouverie House, 154 Fleet St., E.C.4, London, England.
El Sch J—Elementary School Journal. Department of Education, University of Chicago, Chicago.
Eng and Contr—Engineering and Contracting. Gillette Publishing Co., 801 Atwell Bldg., 221 E. Twentieth St., Chicago.
English J—English Journal. University of Chicago Press, 5750 Ellis Ave., Chicago.

Gas Age-Rec—Gas Age-Record. Robbins Publishing Co., Inc., 9 E. Thirty-Eighth St., New York City.
Gas J—Gas Journal. London, England.
Gen Sci Q—General Science Quarterly. W. S. Whitman, Salem, Mass.
Grade Teach—Grade Teacher. (Known as Primary Education-Popular Educator previous to February, 1929.) Boston, Mass.

Heat and Piping Contr Nat Assn Official Bul—Heating and Piping Contractors National Association Official Bulletin. Heating and Piping Contractors National Association, 50 Union Square, E., New York City.
Heat and Ven—Heating and Ventilating Magazine. Heating and Ventilating Magazine Co., 1123 Broadway, New York City.
Heat, Piping and Air Cond—Heating, Piping and Air Conditioning. (Known as Journal of the American Society of Heating and Ventilating Engineers previous to May, 1929.) Engineering Publications, Inc., 1900 Prairie Ave., Chicago.
Historical Outlook. McKinley Publishing Co., 1021 Filbert St., Philadelphia, Pa.
Home Econ News—Home Economics News. Manual Arts Press, 237 N. Monroe St., Peoria, Ill.
H Sch—High School. School of Education, University of Oregon, Eugene, Ore.

H Sch J—High School Journal. University School of Education, Chapel Hill, N.C.

H Sch Q—High School Quarterly. University of Georgia, Athens, Ga.

H Sch Teach—The High School Teacher. The High School Teacher Co., Publication Office, Wright and Main Sts., Blanchester, Ohio.

Hygeia. American Medical Association, 535 N. Dearborn St., Chicago.

Illum Eng—Illuminating Engineer. Illuminating Engineer Publishing Co., London, England.

Illum Eng Soc—Transactions of the Illuminating Engineering Society. Illuminating Engineering Society, 29 W. Thirty-Ninth St., New York City.

Ind Arts and Voc Educ—Industrial Arts and Vocational Education. (Known as Industrial Arts Magazine previous to June, 1930.) Bruce Publishing Co., Milwaukee, Wis.

Ind Arts M—Industrial Arts Magazine. (See Industrial Arts and Vocational Education.)

Ind Educ M—Industrial Education Magazine. Manual Arts Press, 237 N. Monroe St., Peoria, Ill.

Indiana State Bd of Health Monthly Bul—Monthly Bulletin of the Indiana State Board of Health. Indiana State Board of Health, Indianapolis, Ind.

Indiana Teach—The Indiana Teacher. Indiana State Teachers' Association, 205 Hotel Lincoln, Indianapolis, Ind.

J Am Assn Hygiene and Baths—Journal of the American Association of Hygiene and Baths. New York City.

J Bus Educ—Journal of Business Education. Haire Publishing Co., 1170 Broadway, New York City.

J Chem Educ—Journal of Chemical Education. Division of Chemical Education of the American Chemical Society, Easton, Pa.

J Com Educ—The Journal of Commercial Education. The Stenographic-World Publishing Co., 44 N. Fourth St., Philadelphia, Pa.

J Educ—Journal of Education. New England Publishing Co., 6 Beacon St., Boston, Mass.

J Educ (London)—The Journal of Education and School World. William Rice, 3 Ludgate Broadway, E.C.4, London, England.

J Educ Res—Journal of Educational Research. Public School Publishing Co., Bloomington, Ill.

J Health and Phys Educ—Journal of Health and Physical Education. American Physical Education Association, Box 362, Ann Arbor, Mich.

J Home Econ—Journal of Home Economics. American Home Economics Association, 101 E. Twentieth St., Baltimore, Md.

Jr Col J—Junior College Journal. Stanford University Press, Stanford University, Calif.

Jr-Sr H Sch Clearing House—Junior-Senior High School Clearing House. Inor Publishing Co., 32 Washington Place, New York City.

Kans Teach—Kansas Teacher and Western School Journal. Kansas State Teachers Association, 315 W. Tenth St., Topeka, Kans.

Libraries. 216 W. Monroe St., Chicago.

Library J—The Library Journal. Publication Office, 62 W. Forty-Fifth St., New York City.

Library Occurrent. Library Division of the Indiana Library and Historical Department, Indianapolis, Ind.

Manufacturers Rec—Manufacturers Record. Manufacturers Record Publishing Co., Manufacturers Record Bldg., Commerce and Water Sts., Baltimore, Md.

Mich Arch and Eng—The Michigan Architect and Engineer. Detroit, Mich.

Mich Educ J—Michigan Education Journal and Moderator Topics. Michigan Education Association, Washington Ave., Lansing, Mich.

Midland Sch—Midland Schools. Official Publication of the Iowa State Teachers' Association, 504 Youngerman Bldg., Des Moines, Ia.

Milbank Memorial Fund Q Bul—The Milbank Memorial Fund Quarterly Bulletin. Milbank Memorial Fund, 49 Wall St., New York City.

Mind and Body. Mind and Body Publishing Co., New Ulm, Minn.

Minn J Educ—Minnesota Journal of Education. Minnesota Education Association, 2642 University Ave., St. Paul, Minn.

Modern Educ—Modern Education and Individual Instruction. Cleveland, Ohio.

Modern Pub Bldgs—Modern Public Buildings. Bruce Publishing Co., Milwaukee, Wis.

Nat Assn of Deans of Women—Proceedings of the National Association of Deans of Women. Department of Superintendence, National Education Association. Headquarters secretary: 1634 Eye St., N.W., Washington, D.C.

Nat Assn Pub Sch Bus Officials—Proceedings of the National Association of Public School Business Officials. John S. Mount, secretary, State House, Trenton, N.J.

Nat Council on Schoolhouse Construction—National Council on Schoolhouse Construction. Secretary's Office, Milwaukee, Wis.

Nat Educ Assn—National Education Association: Proceedings and Addresses. National Education Association, 1201 Sixteenth St., N.W., Washington, D.C.

Nat Educ Assn J—Journal of the National Education Association. National Education Association, 1201 Sixteenth St., N.W., Washington, D.C.

Nation's Sch—Nation's Schools. The Nation's Schools Publishing Co., Chicago.

Nat Municipal R—National Municipal Review. National Municipal League, 261 Broadway, New York City.

Nat Soc for Study of Educ—National Society for the Study of Education, Yearbooks. Guy M. Whipple, secretary, 10 Putnam St., Danvers, Mass.

Nature M—Nature Magazine. American Nature Association, Washington, D.C.

Neb Educ J—Nebraska Educational Journal. Nebraska State Teachers' Association, 511 Richards Block, Lincoln, Neb.

New England Assn of Chem Teach—New England Association of Chemical Teachers.

Norm Instr and Prim Plans—Normal Instructor and Primary Plans. (See The Instructor.)

N Y State Educ—New York State Education. New York State Education, 617 N. Goodman St., Rochester, N.Y.

Office Appliances. Office Appliance Co., 417 S. Dearborn St., Chicago.

Ohio State Educ Conf—Ohio State Educational Conference. Ohio State University, Columbus, Ohio.

Parents' M—The Parents' Magazine. Parents' Publishing Association, 255 Fourth Ave., New York City.

Parks and Recreation. American Institute of Park Executives, East St. Louis, Ill.

Pa Sch J—The Pennsylvania School Journal. The Pennsylvania State Education Association, 400 N. Third St., Harrisburg, Pa.

Peabody J Educ—Peabody Journal of Education. The Faculty of the George Peabody College for Teachers, Nashville, Tenn.

Pencil Points—Stamford, Conn.

Pentathlon—The Pentathlon. Middle West Society of Physical Education, Ann Arbor, Mich.

Permaflector Lighting. Pittsburgh Reflector Co., Pittsburgh, Pa.

Pittsburgh Sch—Pittsburgh Schools. Pittsburgh Teachers' Association, Pittsburgh, Pa.

Platoon Sch—Platoon School. National Association for the Study of the Platoon or Work-Study-Play School Organization, 1210 D St., N.W., Washington, D.C.

Playground—The Playground. (See Recreation.)

Playground and Recreation. (See Recreation.)

Plumbers and Heat Contr Trade J—The Plumbers and Heating Contractors Trade Journal. (See Plumbing and Heating Contractors Trade Journal.)

Plumbing and Heat Contr Trade J—Plumbing and Heating Contractors Trade Journal. (Known as The Plumbers and Heating Contractors Trade Journal from July 1, 1927, to October 15, 1931.) Plumbers Trade Journal Publishing Co., 515 Madison Ave., New York City.

Power Plant Eng—Power Plant Engineering. Technical Publishing Co., 53 W. Jackson Blvd., Chicago.

Prac Home Econ—Practical Home Economics. (Known as The Home Economist previous to February, 1929; known as The Home Economist and American Food Journal from March, 1929, to December, 1929.) Lakeside Publishing Co., 468 Fourth Ave., New York City.

Progressive Educ—Progressive Education. Progressive Education Association. Williams and Wilkins Co., Mt. Royal and Guilford Aves., Baltimore, Md.

Pub Health Report—Public Health Reports. United States Treasury Department, Public Health Service, Government Printing Office, Washington, D.C.

Publ of the Am Statistical Assn—Publications of the American Statistical Association. Rumford Press Bldg., Concord, N.H.

Q J Speech—Quarterly Journal of Speech. National Association of Teachers of Speech, University of Wisconsin, Madison, Wis.

Recreation. (Known as The Playground previous to June, 1929; known as Playground and Recreation from June, 1929, to January, 1931.) National Recreation Association, 315 Fourth Ave., New York City.

Res Q Am Phys Educ Assn—Research Quarterly of the American Physical Education Association. American Physical Education Association, Box 362, Ann Arbor, Mich.

Rural Sch Bd M—Rural School Board Magazine. (Ceased publication, 1928.) Cleveland, Ohio.

Sanitary and Heat Age—Sanitary and Heating Age. (Known as Sanitary and Heating Engineering previous to June 15, 1929.) Sanitary and Heating Publishing Corp., 239 W. Thirty-Ninth St., New York City.

Sanitary and Heat Eng—Sanitary and Heating Engineering. (See Sanitary and Heating Age.)

Sch—School. The School News Co., 156 Fifth Ave. and Twentieth St., New York City.

Sch and Community—School and Community. Missouri State Teachers Association, Columbia, Mo.

Sch and Home—School and Home. New York City.

Sch and Soc—School and Society. (Took over Educational Review in October, 1928.) Science Press, Garrison, N.Y.

Sch Arts M—School Arts Magazine. Worcester, Mass.

Sch Executives M—School Executives Magazine. (Known as American Educational Digest previous to January, 1929.) The School Executives Magazine Co., 1126-8 Q St., Lincoln, Neb.

Sch Feeding Management—School Feeding Management. Management Magazines, Inc., 913 Merchandise Mart, Chicago.

Sch Library Yearbook—School Library Yearbook. American Library Association, 78 E. Washington St., Chicago.

Sch Life—School Life. Superintendent of Documents, Government Printing Office, Washington, D.C.

Sch M—The School Magazine. Department of Public Instruction, Buffalo, N.Y.

Sch Management—School Management. School Management, Inc., 114 E. Thirty-Second St., New York City.

Sch of Educ Rec—School of Education Record. University of North Dakota, Grand Forks, N.D.

Sch R—School Review. Department of Education, University of Chicago, Chicago.

Sch Sci and Math—School Science and Mathematics. School Science and Mathematics, Publications Office, 404 Wesley Ave., Mount Morris, Ill.

Sci Am—Scientific American. Scientific American Publishing Co., 24-6 W. Fortieth St., New York City.

Sci Educ—Science Education. W. G. Whitman, 350 Lafayette St., Salem, Mass.

Sheet Metal Worker. Edwin A. Scott Publishing Co., Inc., 45 W. Forty-Fifth St., New York City.

Sierra Educ News—Sierra Educational News. California Teachers Association, 508 Sheldon Bldg., 461 Market St., San Francisco, Calif.

Sight-Saving R—The Sight-Saving Review. National Society for the Prevention of Blindness, 370 Seventh Ave., New York City.

Spec—Spectator. 13 York St., Convent Garden, London, England.

Successful Farming. Des Moines, Iowa.

Survey. Survey Associates, 112 E. Nineteenth St., New York City.

Teach Col J—Teachers College Journal. Division of Research, Indiana State Teachers College, Terre Haute, Ind.

Teach Col Rec—Teachers College Record. Teachers College, Columbia University, 525 W. One Hundred Twentieth St., New York City.

Tex Outlook—The Texas Outlook. Texas State Teachers' Association, 708 Anderson Bldg., Seventh and Lamar Sts., Fort Worth, Tex.

Theatre Arts Monthly. Theatre Arts, Inc., 119 W. Fifty-Seventh St., New York City.

Theatre M—Theatre Magazine. Theatre Magazine Co., 22 W. Forty-Eighth St., New York City.

The Forecast—The Forecast, America's Leading Food Magazine. The Forecast Publishing Co., 140 N. Sixth St., Philadelphia, Pa.

The Home Econ—The Home Economist. (See Practical Home Economics.)

The Instructor. (Known as Normal Instructor and Primary Plans previous to 1931.) F. A. Owen Publishing Co., Dansville, N.Y.

Univ H Sch J—University High School Journal. Oakland, Calif.

Univ of Kans Bul of Educ—University of Kansas Bulletin of Education. Bureau of School Service and Research, University of Kansas, Lawrence, Kans.

Univ of Pittsburgh Sch of Educ J—University of Pittsburgh School of Education Journal. University of Pittsburgh, Pittsburgh, Pa.

U.S. Bur Educ Bul—United States Bureau of Education Bulletins. Government Printing Office, Washington, D.C.

U.S. Office Educ Bul—United States Office of Education Bulletins. Government Printing Office, Washington, D.C.

U.S. Pub Health Service, Pub Health Bul—United States Public Health Service, Public Health Bulletins. United States Treasury Department, Surgeon General, Government Printing Office, Washington, D.C.

Va J of Educ—Virginia Journal of Education. Richmond, Va.

Volta R—Volta Review. Philadelphia, Pa.

Western J Educ—Western Journal of Education. 609 Mission St., San Francisco, Calif.

Wilson Bul—Wilson Bulletin for Librarians. H. W. Wilson Co., 950-72 University Ave., New York City.

Wis J Educ—Wisconsin Journal of Education. Wisconsin Journal of Education, 716 Beaver Bldg., Madison, Wis.

Wis Library Bul—Wisconsin Library Bulletin. Wisconsin Free Library Commission, Madison, Wis.

Woman's J—Woman's Journal. Woman's Citizen Corp., 171 Madison Ave., New York City.

admin—administration
(adv)—advertising section
Ag—August
agri—agriculture or agricultural
Am—American
Ap—April
assn—association
bd—board
bds—boards
bibliog—bibliography
bldg—building
Bros.—Brothers
bul—bulletin or bulletins
bur—bureau
Ch.—chapter
Co.—company
col—college
comp.—compiler
contr—contributions
cu.—cubic
D—December
dept—department
diag—diagram or diagrams
div—division
econ—economics
(ed)—editorial
ed.—editor; eds.—editors
ed—edition
educ—education or educational
el—elementary
ext—extension
F—February
fig—figure or figures
fold—folder or folders
found—foundation
ft.—foot
h—high
il—illustration or illustrations
inc.—incorporated
inst—institute
instr—instruction
Ja—January
Je—June
Jl—July
jr—junior
Ltd.—limited
mim—mimeographed
Mr—March
ms—manuscript
My—May
N—November
nat—national
N.E.A.—National Education Association
no.—number
O—October
p.—page or pages
proc—proceedings
pt.—part
pub—public
publ—publications
ref—reference
res—research
rev—revised
S—September
sch—school or schools
sec—secondary
soc—society
supt—superintendence or superintendent
teach—teachers
transac—transactions
univ—university
U.S.—United States
voc—vocational
vol—volume
vs.—versus
Y.M.C.A.—Young Men's Christian Association
Y.W.C.A.—Young Women's Christian Association

XII. Mechanical Equipment

3762. *Heating and Ventilating Magazine.* "Bibliography—School heating and ventilating from January 1, 1923, to July 1, 1930." *Heat and Ven* 27:113-14, 116 S '30

A list of magazine articles on this subject, telling exactly where to find them.

3763. National Safety Council. "School busses—their safe design and operation." *Educ News* 5:17-20 N-D '29

Lists rules which should be given consideration in the construction of school busses.

3764. *Power Plant Engineering.* "Vashon School in St. Louis makes own power." *Power Plant Eng* 910-14 S 1 '28

Compares the cost and efficiency of various types of ventilating and heating systems within one school system. The bulk of the article is a description of a school power plant and how it reduced costs. A list of the principal mechanical equipment is included.

3765. Swoboda, H. O. "Generated *vs.* purchased electrical energy." *Power Plant Eng* 254, 257 F 15 '28

An experience of a school district in Pennsylvania in providing its own electrical power. Several tables present cost data over a four-year period so that comparison with cost of purchased power can be made. The conclusions are that it is more economical to generate power.

Cross-index†

28 89 *2281

SANITATION

3766. Hall, Verne. *Sanitary equipment of secondary schools.* Master's Thesis, Univ of California, Berkeley, 1929. 48 p

A study, the purpose of which was to apply the test of use to the sanitary equipment placed in the secondary schools of California and to establish a standard based on peak use.

3767. National Child Health Council. *Health for school children.* U. S. Bur of Educ, Sch Health Studies no. 1, rev, 1927. 74 p

In Section VI the committee discusses essentials for healthful school buildings. Among other things site, general plan, play facilities, seating, water supply, heating and ventilating, and toilets are discussed.

3768. *Nation's Schools.* "The importance of soap and water in the school program." *Nation's Sch* 8:90 Ag '31

Discusses soap dispensers and hand-washing facilities.

3769. Pierce, D. H. *Provisional or tentative regulations or standards relating to the facilities through which to provide a healthful environment in school.* Doctor's Thesis, New York Univ, New York City, 1928

A study of standards of facilities providing healthful environment in schools. The subjects treated are buildings, systems of operation, supply and maintenance, grounds, personnel, equipment, social aspects, health examination, treatment and control, physical education, and plant housekeeping.

† The numbers in the cross-index refer to references, in all three parts of the bibliography, which deal with the subject under which the cross-index appears.

3770. State of California. *Standards for sanitary fixtures in public schools.* State Dept of Educ, Div of Schoolhouse Planning, bul no. K-1, Sacramento, Ja '30. plans, mim, 19 p

Gives suggestions and sets standards for toilets, drinking fountains, ventilation, screens, floors, basins, and soap containers, and makes statements concerning the proper care of these.

3771. Tappan, Julia B. "Who is to blame for the school's lack of hand washing facilities?" *Nation's Sch* 8:25-30 N '31. il

Popular report, made by the Cleanliness Institute, of a study of 145 schools in 15 states.

Cross-index

2784

HEATING AND VENTILATION

3772. *Aerologist.* "Report of the committee to coöperate with the Rochester Board of Education on school ventilating tests." *Aerologist* 4:19 Mr '28; also *Am Soc Heat V E J* Mr '28

3773. "The synthetic air chart." (ed) *Aerologist* 4:14-18 Jl '28

Describes a synthetic air chart and discusses the attitude of the New York Commission on Ventilation towards it. The chart is shown in the article.

3774. "Keeping school buildings clean." *Aerologist* 4:40 O '28

3775. "The climate under your shirt." (ed) *Aerologist* 5:12-13 Mr '29

A discussion of air conditions and of the school room connection with these.

3776. "Correspondence and conference with Surgeon General Cummings." *Aerologist* 5:22-4 D '29

Gives statement of Cummings relative to ventilation and some letters of protest against this statement.

3777. "Are ventilation laws blocking progress?" (ed) *Aerologist* 6:22-3, 46 D '30

An answer to an editorial which appeared in *Heating and Ventilating Magazine*, contending that ventilation laws are blocking progress.

3778. "A code of air conditioning." (ed) *Aerologist* 8:1 Ja '32

Suggests a number of standards for the proper conditioning of air.

3779. Ait, Harold L. "Heating and ventilation specifications." *Heat and Ven* 25: 83-6; 74-5, 82; 80-1; 80-4; 72-5; 71-3; 66-9; 69-73 Mr, Ap, My, Jl, Ag, S, O, N '28

These articles go into detail regarding the preparation of specifications for contracts for heating and ventilation.

3780. "Air conditioning and its problems." *Sanitary and Heat Eng* 108:100-1, 112, 141-2 F 15 '29

Explanation of the process for humidification and cooling of air. Very technical and complete.

3781. "Saving fuel costs in school heating." *Am Sch Bd J* 78:54-5 My '29

Description of the heating system in the high-school building at Douglass, Kansas.

3782. "How automatic temperature controls can be profitably sold by master plumbers and heating contractors." *Plumbers and Heat Contr Trade J* 90:8-9, 36; 16-17, 44, 81 Ap 15, My 1 '31. plans

Tells of the advantages and proper manipulation of temperature controls.

3783. *American Architect.* "Radiator enclosures." *Am Arch* 134:474 O 5 '28
Discusses the problem of concealing radiators and offers some suggestions.

3784. *American Journal of Public Health.* "Ventilation and comfort." (ed) *Am J Pub Health* 20:49-50 Ja '30
Sets standards for air conditions necessary for comfort and safety.

3785. *American School Board Journal.* "How much fresh air does the school child need?" *Am Sch Bd J* 77:40, 127-8 Ag '28
An attempt to answer the question as to how much fresh air a school child needs. Tables are shown and formulae used.

3786. "A study of school ventilation in rural New York." *Am Sch Bd J* 79:143-4 N '29
Report of a study of ventilation by the New York Commission on Ventilation, showing the effect on uniformity of temperature and improvement in health conditions. Study included 860 pupils and covered a period of ten weeks.

3787. "A suggested code for schoolroom ventilation." *Am Sch Bd J* 81:61, 110, 113 N '30. il
After pointing out the three difficult problems in ventilation and setting up seven objectives, there is presented a detailed code for schoolroom ventilation.

3788. *American Society of Heating and Ventilating Engineers Journal.* "Developments in the New York school ventilation study." *Am Soc Heat V E J* Ja '29

3789. Anderson, Marius. "Practice in Seattle." *Heat and Ven* 27:71-3 S '30
Heating and ventilating as practiced in Seattle schools are discussed in this article.

3790. Austin, Ward Hunting. "Electric heating of schools." *Heat and Ven* 26:56-61 D '29. il
Discussion of the electrical heating of schools describing the systems in a number of schools and showing the cost of installation and operation.

3791. Bailhe, George. "Heating by electricity." *Am Arch* 137:60-1, 81-2 Mr '30. il
A discussion of house heating by electricity, the principles of which may be applied to school-house heating.

3792. Barker, A. H. "The principles of calculation of low-temperature radiant heating." *Heat and Ven* 29:48-53; 48-54 F, Mr '32
Abstract of a paper read before the Institution of Heating and Ventilating Engineers, England, in which is described the method of calculation for a typical English schoolroom.

3793. Blanchard, Harold F. "Panel heating." *Am Arch* 138:32-3, 90, 92, 94, 96, 98 N '30. plans, il
Discusses heating by means of pipes concealed in the ceiling. Illustrates the arrangement of the heating apparatus.

3794. Bryce, Peter H. "The impasse in the school ventilation situation." *Heat and Ven* 25:91-2 Ja '28
An excellent discussion of validity of school records of respiratory illness as a criterion for the efficacy of any ventilation system. Proposes an experiment to check these.

3795. "Symposium on schoolroom ventilation." *Heat and Ven* 25:84-6 D '28
Report of views of different men on ventilation and its relation to health.

3796. Butsch, Russell L. C. *A comparative study of the effects of different types of school-building ventilation on the health of pupils.* Doctor's dissertation.

Univ of Chicago, 1929. 445 p.; abstract in *El Sch J* 30:16-26; 123-31; 208-17 S, O, N '29

A report of an extensive study made by the author thru a grant from the New York Commission on Ventilation. The study was designed to serve as a check upon the study of the New York Commission.

3797. "Does school ventilation aid health?" *Am Sch Bd J* 83:60-2, 133 Jl '31

Report of a study of factors in connection with the relationship between health and type of ventilation in six Oak Park, Illinois, schools.

3798. Calahan, John. "Power and heating equipment for a modern high school." *Heat and Ven* 27:100-1, 112 S '30

Describes the heating plant and equipment of the William L. Dickinson High School of Jersey City.

3799. Carrier, William H. "Standards of heating and ventilation." *Sch Executives M* 51:58-60, 90 O '31

Discusses air movement and air conditions, heat and moisture loss from the body, effective temperatures, influence on health, ventilation and positive ventilation.

3800. Carrington, George D. "Rural school heating, ventilating and sewage disposal." *Rural Sch Bd M* 1:26-8, 32 My '28

3801. Cassell, John D. "Practice in Philadelphia." *Heat and Ven* 27:71 S '30

Describes the practices of the Philadelphia system relative to heating and ventilation.

3802. Challman, Samuel A. "Corridor ventilation." *Am Sch Bd J* 76:45-6 Ja '28. il

This article is a plea in favor of the use of the corridors instead of outlet ducts for getting rid of used air from the classrooms. The idea is to have grilles in the doors from classrooms into the halls and the used air will go into the halls and up the stair wells to openings thru the attic. The writer answers a number of serious objections to the system.

3803. "Corridor venting of school buildings." *Heat and Ven* 26:51-5 My '29. plans, il

Discusses the essentials of ventilation and describes a number of systems paying particular attention to venting.

3804. Cherne, Realto E. "Air distribution and duct friction." *Heat and Ven* 28:63-7 F '31. plans

Discussion of different types of distributing systems and their effectiveness. Instructions for sizing ducts are given.

3805. Childs, L. W. "School ventilation in Cleveland." *Am Assn of Sch Physicians* (Proc) vol 1, 1928

3806. "Reports on schoolroom ventilation studies, Cleveland, Ohio." *Am J Pub Health* 19:59-64 Ja '29

Compares the effects of forced draft and open-window ventilation upon respiratory affections as shown by a study in the Cleveland schools.

3807. Close, Paul D. "How much insulation to use." *Am Arch* 137:27-9, 98, 100, 102 Mr '30. il

Report of an extensive investigation of the amount of insulation which should be used.

3808. "Thickness of insulation necessary to cut radiation costs." *Am Arch* 138:32-3, 92 D '30. il

Develops formula for determining the thickness of insulation necessary to cut radiation costs.

3809. Curtis, Henry S. "The hygiene of the modern school." *Sch Executives M* 49:417-19 My '30

Discusses ventilation, temperature, humidity, open-air rooms, ozone, drinking water, desks, showers, swimming pools, and toilets.

3810. Davis, Telford R. "Heating and ventilation of a small modern school." *Heat and Ven* 29:42-4 F '32. plans, il

Description of the heating and ventilation system of the split system type installed in Public School No. 56, Indianapolis, with installation plans and illustrations.

3811. Demary, R. C. "Factors in the efficiency of school heating." *Am Sch Bd J* 79:43-5 N '29. plans, il

A discussion of the enormous waste in school heating and the common neglect of proper supervision of this equipment. Suggestions for overcoming losses are given.

3812. Dempsey, C. H. "Schoolhouse ventilation." *J Educ* 107:411-12 Ap 2 '28

Lists needs for proper ventilation and discusses changes in attitude toward it as information has increased. Essentials of a proper system are set out, and its manipulation is discussed.

3813. *Domestic Engineering.* "Air conditioning unit designed for winter heating and summer cooling." *Domestic Eng* 137:131 N 28 '31. il

Tells briefly of a device for year-round use in air conditioning.

3814. Downes, Nate W. "Practice in Kansas City." *Heat and Ven* 27:73-4 S '30

Sets forth certain practices in the Kansas City, Missouri, schools, some of which differ from those of other systems.

3815. Duffield, Thomas J. "School ventilation, its effect on the health of the pupil." *Am J Pub Health* 17:1226-9 D '27

Report of the work of a number of organizations in the study of this problem. Natural ventilation is commended.

3816. "The school ventilation studies of the New York Commission on Ventilation." *Am Sch Bd J* 76:57-9, 160 Ja '28. charts

Discussion of the organization and activities of the New York Commission on Ventilation. Summaries of some of its findings are given.

3817. "Effects of mechanical and natural ventilation on the health of school children." *Heat and Ven* 25:92-3 F '28

Tells of a study reported in the *Journal of the American Society of Heating and Ventilating Engineers* for April, 1928. Discusses the effects of mechanical and natural ventilation on the children in six schools at Syracuse, New York.

3818. "The school ventilation study in Syracuse, New York." *Am J Pub Health* 18:325-30 Mr '28

Report of a study by the New York Commission on Ventilation concerning the effect of ventilation on the health of school children. Tables give much information relative to the findings.

3819. "How much fresh air does the school child need?" *Am Medical Assn J* 90:1276-8 Ap 21 '28

Discusses ventilation and heating of the schoolroom and their relation to the well-being of the child. Gives a formula for determining the amount of fresh air needed.

3820. "Current school ventilation practices in typical American cities." *Am Sch and Univ* 1928-29:45-53. plans, il

Description of the methods of air conditioning in use by six cities of the United States in their schools. Objectives of school ventilation are listed.

3821. "Reports on schoolroom ventilation studies, Syracuse, New York." *Am J Pub Health* 19:64-71 Ja '29

Gives detailed information relative to a schoolroom ventilation study in Syracuse which covered a period of three years. No definite conclusion is reached.

3822. "The New York Commission on Ventilation." *Milbank Memorial Fund Q Bul* 7:67-74 Jl '29

Report of a ventilation study in the Cattaraugus County schools by the New York Commission.

3823. "A study of rural school ventilation." *Pub Health Report* 44:2383-2410 O 4 '29

Report of the school ventilation study of Cattaraugus County, New York, by the New York Commission on Ventilation. The outstanding conclusions reported are that (1) rural schools are more generally overheated by furnaces than by stoves, (2) lateral temperature distribution is poor in stove-heated schools, (3) vertical differences in temperature are great in rooms where no provision is made for the artificial circulation of air, and (4) one- and two-room schools are highly unsatisfactory in heating and ventilation.

3824. "Importance of classroom ventilation." *Aerologist* 5:11 D '29

3825. "New facts in school ventilation controversy." *Heat and Ven* 27:68-80 F '30; reprint in *Mind and Body* 36:393-9 Mr '30

Points out the changes in conception of school ventilation brought about by the 1926-1928 Syracuse and Cattaraugus County, New York, studies as related to the earlier reports of the commission.

3826. "A critical review of the school ventilation study in Oak Park, Forest Park, and Maywood." *Aerologist* 6:5-9, 57; 62-4 F, Mr '30

A summary and analysis of a study made by Russell L. C. Butsch. This considers the effect of ventilation upon pupil health.

3827. "The principles of school ventilation—a review of recent experimental work and the consensus of scientific opinion at the present time." *Aerologist* 6:3-12 Ap '30

A summary of current thought on problems of ventilation which reviews some recent studies of ventilation and sets some standards for schools.

3828. "Suggestions for improving schoolroom air conditions." *Heat and Ven* 27:90-2, 112 S '30

Offers suggestions for proper air conditioning and discusses the relative values of different systems.

3829. "The New York Ventilation Commissions." *Aerologist* 7:13-15; 36-7; 34-5 Ap, My, Je '31

A detailed account of the work of the New York Ventilation Commission and a summary of its findings.

3830. "School ventilation—principles and practices." *Aerologist* 7:5-7, 46 D '31

Reviews the final report of the New York Commission on Ventilation and expresses some opinions concerning it.

3831. "Modern school ventilation." *Arch Forum* 55:755-8 D '31

Discusses factors contributing to a sense of comfort as affected by air conditions. Presents new trends in theory of proper ventilation. Gives suggestions for the selection of ventilating systems.

3832. Dwyer, Thomas F. "Design of heating and ventilating systems for school buildings." *Heat and Ven* 27:66-70 S '30. plans, il

Discusses problems of designing, heating, and ventilation systems which are peculiar to school buildings. These are presented in relation to classroom, auditorium, gymnasium, cafeteria, and toilets.

3833. *Electrician*. "School heating." *Electrician* 105:389 S 19 '30

Discusses the heating of the Neasden Senior School in England with Morganite electric radiators and thermostats. Gives an illustration of ceiling model radiator installation.

3834. *Elementary School Journal.* "Natural ventilation superior." *El Sch J* 28:483-4 Mr '28
Summary of the findings of the New York Commission on Ventilation.

3835. "Experiments with regard to ventilation." (ed) *El Sch J* 29:93-5 O '28
Reference to investigation of New York Commission on Ventilation and a statement about future investigations.

3836. "Ventilation of schoolrooms." *El Sch J* 29:651-3 My '29
Statements made by A. C. Willard, Professor of Heating and Ventilation, University of Illinois.

3837. "Window ventilation." *El Sch J* 30:87-8 O '29
Summary of a report on ventilation made by the U. S. Public Health Service.

3838. Elzear, Brother J. "Solving ventilation problems in a parochial high school." *Nation's Sch* 1:53-8 Je '28. il
Description of a splendidly equipped and well-built school building of the St. George High School at Evanston, Illinois. The problem of ventilation is dealt with particularly.

3839. Ewart, Joseph A. "Ventilation viewpoints." *Am Sch Bd J* 80:49-51, 138 Mr '30. plans, il
Gives the Stamford standards and methods of approach, based on a study of the ventilation systems in use in Stamford, Connecticut, during the last ten years.

3840. "Unit heating and corridor ventilation in the Stamford schools." *Heat and Ven* 27:81-5, 116, 118 S '30
Describes the system used in the schools of Stamford, Connecticut, and discusses its merits.

3841. Faber, Guy S. "Fundamentals of air conditioning." *Plumbers and Heat Contr Trade J* 90:9-10, 14 Ap 1 '31. plans, il
Tells how to secure a correct balance of humidity and temperature.

3842. Fahnestock, Maurice K. "Effect of enclosures on direct steam radiator performance." *Am Arch* 134:201-10 Ag 5 '28. plans, il
Report of a year's study of steam and hot water systems conducted by the University of Illinois and coöperating organizations.

3843. Faust, H. M. *How to use Ohio coal in school heating plants.* Ohio State Univ. Univ Studies, Engineering Experiment Station Circular no. 23, Columbus, My '31. il, 18 p
Discusses the condition and use of equipment for burning this kind of coal. Economy in firing is also discussed.

3844. Fishbein, Morris. "Ventilation of schools." *Sci Am* 139:218 S '28
Comments on the report of the New York Commission on Ventilation of the study conducted in Cattaraugus County, New York.

3845. Fitts, Joseph C. "The results of a survey of the heating industry." *Plumbers and Heat Contr Trade J* 89:62D-64 Jl 1 '30
Report of a study which shows, among other things, the portion of total building cost included in the heating and ventilating contract in different cities.

3846. Foster, Charles. "Ventilating a large high school in Duluth." *Heat and Ven* 26:60-6 Ag '29
Describes the ventilating system of Denfeld Senior High School. Uniform temperature, winter and summer, is made possible. Plans show the detail.

3847. *Gas Age-Record.* "Large school heated with natural gas in Cheyenne, Wyoming." *Gas Age-Rec* N 2 '29

3848. Goldthorpe, J. H. "Ventilation methods and practices in village schools." *J Educ Res* 22:274-87 N '30

A review of the findings in a study of ventilation methods and practices in 210 school buildings constructed since 1913 in communities of from 500 to 5,000 population in Iowa, Minnesota, Ohio, and Pennsylvania.

3849. Greenburg, Leonard. "Report on schoolroom ventilation studies, New Haven, Connecticut." *Am J Pub Health* 19:55-9 Ja '29

One part of a symposium on schoolroom ventilation. Compares results obtained in mechanically ventilated schools with those in schools with natural ventilation.

3850. *A study of the relationship between type of school ventilation and respiratory illness in certain schools of New Haven, Connecticut.* U. S. Pub Health Service, Reprint no. 1264, 1929, 17 p.; also *Pub Health Report* 44:285-301 F 8 '29

This study, a comparison of rooms ventilated by mechanical means and by the open-window method, confirms the findings of the New York Commission on Ventilation of 1916-1917 except in so far as these studies bear on the importance of very slight degrees of overheating, and also the findings of the New York Commission on Ventilation made in Syracuse, New York, in 1927.

3851. Griffin, J. C. and Clark, S. E. *Suggestions on school housekeeping.* State of Texas, Dept of Educ, bul no. 300, Austin, Ja '3Z. 17 p

Discusses school grounds, water supply, toilets, play equipment, lighting, blackboards, and heating and ventilation.

3852. Haley, H. S. "Practice in San Francisco." *Heat and Ven* 27:74 S '30

A statement of the practices in the schools of San Francisco relative to heating and ventilation.

3853. Hall, H. T. "An easy way to figure radiation in underheated rooms." *Domestic Eng* 133:46-50, 95, 97-8 O 18 '30. charts

Discusses heating and tells how to figure radiation requirements.

3854. Hallett, Edwin S. "Present status of ozone in ventilation." *Domestic Eng* Ap 21 '28

3855. "Continued progress of ozone in St. Louis." *Aerologist* 4:8, 36 My '28

Discusses the necessity of cleansing the air and compares the need for this with the need for purifying the drinking water.

3856. Hanburger, Fred W. "Estimating and designing heating systems." *Heat and Ven* 28:69-72 Mr '31. plans

Instructions are given for estimating the size of system necessary and the design best adapted to the building.

3857. Hart, Chester. "New unit ventilators and what they mean to the school." *Nation's Sch* 8:102, 104 Ag '31. il

Description of how the newer type of unit ventilator operates.

3858. *Heating and Ventilating Magazine.* "When experts disagree—." *Heat and Ven* 24:93-4 N '27

Discussion of the reports made at the meeting of the public health engineering section of the American Public Health Association convention, Cincinnati, October 18, 1927.

3859. "Heating and ventilating a large church school." *Heat and Ven* 25:74-8 Mr '28. plans, il

Describes the mechanical equipment for heating and ventilating in the million-dollar St. George High School, Evanston, Illinois.

3860. "Proper location of the air valve venting mains." *Heat and Ven* 25:88 S '28. plan

Answers the question asked by a subscriber as to where the air valve venting mains should be located.

3861. "New ventilation tests to be made in New York schools." *Heat and Ven* 25:89-90 S '28

Report of prospective ventilation studies in New York schools by the New York Commission on Ventilation.

3862. "Underfloor water heating system for English schools." *Heat and Ven* 25:98 D '28. plans

Report on a paper by Dr. H. M. Vernon on "Methods of Heating and Ventilating Schools and Their Influence on Health." Describes an underfloor heating system.

3863. "The Weeks report on heating and ventilating New York public school buildings." *Heat and Ven* 26:90 D '29

Resumé of a report made by A. L. Weeks on construction of school buildings by New York City, paying particular attention to heating and ventilating.

3864. "Thermal-Univent system for schools." *Heat and Ven* 27:119 Ag '30. diag

Describes this system of ventilation and shows its cycle of operation.

3865. "Ventilation laws are blocking progress." (ed) *Heat and Ven* 27:65 S '30

Shows that laws are not changing to keep pace with the modern scientific findings relative to school ventilation.

3866. "Adaptation of heating and ventilating equipment to school building of modernistic design." *Heat and Ven* 27:97-8 S '30

Describes the arrangement of the heating and ventilating equipment in the new school for social work, New York. The auditorium receives special attention.

3867. "Deficient heating increases school absenteeism." *Heat and Ven* 27:99 S '30

Summary of a report on a study of this subject issued by the Industrial Health Research Board of Great Britain.

3868. "Abstracts of state ventilation and heating laws for school buildings." *Heat and Ven* 27:102-9 S '30

Brief statements of the law in a great number of states in regard to ventilation and heating. The laws of a few states are given in some detail.

3869. "Suggestions for a school ventilating code." *Heat and Ven* 27:110-11 S '30

Proposes a code for ventilating which will supplant many obsolete legal requirements.

3870. "Corridor venting in an Indiana school." *Heat and Ven* 28:76-7 My '31. il

Description of the ventilating system of the Lincoln School for the Colored at Evansville. This system features corridor venting.

3871. Herman Nelson Corporation. *Herman Nelson system of ventilation.* Herman Nelson Corporation pamphlet, Moline, Ill., 1930. plans, il, 30 p

Discusses the effect of atmospheric conditions of the classroom upon health and gives a brief history of ventilation. Shows how this system conforms to the science of proper ventilation.

3872. *School ventilating practice.* Herman Nelson Corporation pamphlet, Moline, Ill., 1931. 11 p

Discusses the costs of ventilation and wastes brought about by improper ventilation. Tells how savings may be made in construction, fuel, and maintenance costs by proper ventilation systems.

3873. Hill, E. V. "Unit ventilation of windows." *Aerologist* 4:23, 40-1 N '28
Quotes from the *New York World* on the work of the New York Commission on Ventilation and answers the argument for window ventilation.

3874. "Chickens come home to roost." *Aerologist* 5:30 D '29

3875. "The Chicago Commission on Ventilation." *Aerologist* 6:48-51, 53-4 Ag '30. il
Tells of the organization and work of this commission and of some of its findings. Also gives a list of resolutions on ventilation.

3876. "School ventilation as we see it." *Aerologist* 7:17-18, 24-5; 14-16; 12-14; 16-17; 16-18 S, O, Je, Jl, Ag '31. il
Story of the progress of ventilation and of its application to schools. Also reports some studies of conditions in schools.

3877. Hixson, Joseph H. *Fuel-saving practices and devices.* Univ of the State of New York, Sch Buildings and Grounds Div, bul no. 946, Albany, Ap 15 '30. il, 29 p.; reviewed in *Am Sch Bd J* 81:68, 70, 73-4, 76, 78 N '30
Report of a study of methods of saving in fuel costs in the public schools of New York.

3878. Howatt, John. "Heating and air conditioning in the Hugh Manly Junior High School, Chicago." *Heat, Piping and Air Cond* 1:109-14 Je '29
A description of the split system in a large junior-high-school building whereby temperature is kept at 68° to 70° and humidity at 40 per cent.

3879. "Heating and air conditioning in a junior high school." *Heat, Piping and Air Cond* N '29

3880. "Control of air conditions in school buildings." *Heat and Ven* 27:86-9 S '30
Discusses the problems of overheating and the value of controlling devices.

3881. Hubbard, Charles L. "Heating and ventilating schools." *Bldg Age* Ag '28

3882. "Some interesting methods of heating basement rooms with most effect." *Plumbers and Heat Contr Trade J* 88:30-2 My 1 '30. plans
Discusses different methods of heating basement rooms and offers suggestions for some problems which present themselves in this connection.

3883. "Heating and ventilating auditoriums and theatres." *Plumbers and Heat Contr Trade J* 91:12-13 Jl 1 '31. plans
Discusses schemes for conditioning air in assembly halls. Recirculation and other similar problems are discussed.

3884. "Arrangements for heating vestibules." *Plumbers and Heat Contr Trade J* 91:26-7 Jl 15 '31. plans
Suggests methods of setting up apparatus for heating vestibules. Both large and small entrances are considered.

3885. "Window drafts need not affect heating installations." *Plumbers and Heat Contr Trade J* 91:14-19 Ag 1 '31. plans
Discusses three ways for stopping leakage in steam and hot water systems. Also tells how to overcome the ill effects of window drafts in heating installations.

3886. Hutchinson, A. E. "Heating and ventilating Cleveland's schools." *Heat, Piping and Air Cond* 1:553-6 N '29
A discussion of the heating and ventilating practices in the Cleveland schools where the "spit" system is in use.

3887. *Hygeia.* "Ventilation of one-room school." *Hygeia* 5:598 N '27
Response to a letter of inquiry concerning proper ventilation of a particular school building.

3888. "School ventilation." *Hygeia* 7:300 Mr '29
Reply to a letter inquiring about proper school ventilation and heating.

3889. Ingels, Margaret. "Why mechanical ventilation in schools is under fire." *Heat and Ven* 26:62-4 Mr '29; also *Mind and Body* 36:56-60 My '29
Discussion of some of the by-products of the study made by the New York Commission on Ventilation, Syracuse, New York. Points out the duty of the heating and ventilating engineer in the construction of a school building.

3890. *Journal of the American Medical Association.* "Ventilation of schoolrooms." (ed) *Am Medical Assn J* 92:900-1 Mr 16 '29; reprint in *Sch and Soc* 29:443-4 Ap 6 '29
Points out that the New York Commission on Ventilation in their 1921 report and in their more recent Syracuse, New York, study and the United States Public Health Service Study in New Haven, shows that window ventilation is superior to mechanical device ventilation so far as frequency of respiratory illness in school children is concerned.

3891. "Ventilation and health." (ed) *Am Medical Assn J* 93:1732-4 N 30 '29
Discusses the need for proper ventilation and tells something of the development of our present attitude towards it.

3892. "Ventilation." (ed) *Am Medical Assn J* 97:1468-9 N 14 '31; reprint in *Mind and Body* 38:829-30 Mr '32
Comments upon the lagging of practice behind science as shown by the conclusions reached by the New York Commission on Ventilation.

3893. Keene, Charles H. *The physical welfare of the school child.* Houghton, Mifflin Co., Boston, 1929. 505 p
Chapter III, "The school plant," pages 27 to 76 and Chapter XI, "The playground," pages 239 to 268 apply particularly to this work. Standards for both are given. Many helpful ideas are to be found in other chapters.

3894. Kellogg, Alfred. "Heating and ventilating the school." *Arch Forum* 48:453-8 Mr '28
The following five systems of ventilating a classroom are described and evaluated: (1) the gravity indirect system of heating with gravity ventilation; (2) the plenum fan system; (3) the split system; (4) the unit ventilation; and (5) the open-window system.

3895. Kimball, D. D. "Schoolroom ventilation of the last forty years." *Am Sch Bd J* 82:57 Mr '31. il
A history of the development of our ideas of school ventilation and a discussion of some new systems.

3896. Laird, Donald A. "Air." *Sci Am* 142:14-16 Ja '30
Points out that temperature, humidity, and motion are the chief factors in refreshing air.

3897. Lewis, L. L. "Methods of air distribution in auditoriums." *Heat and Ven* 25:91-3 Ag '28. plans
Presents some of the problems of distribution of air and offers some solutions for them.

3898. Lewis, Samuel R. "Practical ventilation for schoolrooms." *Am Sch Bd J* 77:53-4, 158, 161 Jl '28. il; also *Heat and Ven* 25:91-2 F '28
An article describing an arrangement for ventilation, using windows or any other source of unheated fresh air for fresh-air supply. Illustrations are good.

3899. "School building ventilation." *Heat, Piping and Air Cond* 1:494-6 O '29

3900. "Floors as heating ducts in Toledo high schools." *Am Arch* 138:42-3, 96, 98 Jl '30. plans, il

Describes the type of heating used in Toledo, where combined heating and ventilating have proved most satisfactory. Space between joists is used as air ducts.

3901. "Trends in school heating practice." *Heat and Ven* 27:78-80, 111 S '30

Presents present-day practices and trends relative to fan duct systems and unit ventilators, cast-iron and steel boilers, oil burners, gas boilers, domestic stokers, steam and water heating, air conditioning apparatus, concealed radiation, and a number of other things.

3902. Lovejoy, P. C. "Laying in the winter's coal supply for the school system." *Nation's Sch* 4:79 Ag '29

A discusion of some factors entering into the wise purchasing of fuel.

3903. McCornack, W. R. "First principles in unit ventilation for schools." *Heat and Ven* 25:93-4 F '28

Description of the mechanical ventilation plant in the Caledonia High School, East Cleveland, Ohio.

3904. "Application of unit ventilation systems for schools." *Am Soc Heat V E J* Ap '28

3905. McMahon, Edna T. "School sanitation in relation to health." *Chicago Prin Club Bul* (Fifth yearbook) 1930:185-96

Discussion of ventilation, temperature, air movement, humidity, and the activities connected with the cleaning of different parts of the school building.

3906. Meier, Konrad. "What is the trend in radiator design?" *Heat and Ven* 25:53-6 S '28. il

Gives some of the story of the development of radiators and shows modern trends relative to them. Gives advantages and disadvantages of some.

3907. Metropolitan Life Insurance Company. *Fresh air.* Metropolitan Life Insurance Co., Health Bul for Teach, no. 15, p. 1-4, New York City, N '30

Discusses the properties of good air, moisture in the air, air movement, and the relation of climate and season to air.

3908. *Milbank Memorial Fund Quarterly Bulletin.* "Final contribution of the New York Commission on Ventilation." *Milbank Memorial Fund Q Bul* 10:33-40 Ja '32

Review of the final report of the New York Commission. The recommendations of the committee are given.

3909. Miles, J. C. "Side-wall warm-air registers versus baseboard or floor registers." *Sheet Metal Worker* 22:541 S 18 '31. diag

Brief presentation of the air currents produced by each system and a conclusion in favor of the baseboard or floor registers.

3910. *Mind and Body.* "Schoolroom ventilation." *Mind and Body* 38:680-2 D '31

Discusses the status of ventilation in the United States, making comparisons of conditions in the several states.

3911. Moore, S. P. "Physical and physiological principles in school ventilation." *Aerologist* 4:13 Ag '28

3912. "Unit ventilation makes for health at York Community High School." *Aerologist* 6:33-4, 58-9 My '30. il

Describes the building at Elmhurst, Illinois, and pays particular attention to its ventilating system.

3913. Myers, J. Arthur. "The role of air in education, past and future." *Aerologist* 7:5-9, 44-5 S '31. il

Discusses the effect of air upon the human body, the proper conditioning of air, and the relation of each of these to the school ventilation.

3914. *Nation's Schools.* "Ventilation in schoolrooms." *Nation's Sch* 2:18 S '28

Essentials of ventilation are listed and instructions for obtaining proper ventilation given.

3915. "A scientific definition of schoolroom ventilation." *Nation's Sch* 5:36 Ja '30

States the oxygen and carbon dioxide content of air necessary to well-being and tells what constitutes good ventilation.

3916. New York Commission on Ventilation. *Studies in school ventilation.* 1932

This publication consists of reprints of contributions Nos. 2 to 6 inclusive of the New York Commission on Ventilation, all of which were originally published in the *American Journal of Hygiene.* The following reprints are included:

Contribution No. 2. "A study of ventilation and respiratory illness in Syracuse schools; with an analysis of factors affecting criteria used," in volume 12 of the *American Journal of Hygiene,* July, 1930, pages 196 to 214.

Contribution No. 3. "A study of ventilation and respiratory illness in Syracuse schools: Rate of air flow and room temperature in relation to the health of school children," in volume 12 of the *American Journal of Hygiene,* July, 1930, pages 215 to 237.

Contribution No. 4. "A study of ventilation and respiratory illness in New York schools; comparison of window-gravity ventilation and unit fan ventilation with varying air flow," in volume 13 of the *American Journal of Hygiene,* January, 1931, pages 235 to 254.

Contribution No. 5. "A study of rural school ventilation in Cattaraugus County, New York," in volume 14 of the *American Journal of Hygiene,* July, 1931, pages 49 to 78.

Contribution No. 6. "Vasomotor reactions to localized drafts," in volume 15 of the *American Journal of Hygiene,* January, 1932, pages 1 to 35.

3917. Nobis, H. M. "Obtaining even temperature in a school building." *Heat and Ven* 27:82-5 Ja '30. plans, il

Sets out some essentials of good heating and ventilation. Describes the system installed in the Allen School, Elyria, Ohio.

3918. "Practice in Cleveland." *Heat and Ven* 27:76-7 S '30

Criticizes the heating and ventilation law of Ohio and states his own code. Sets out the practices in the Cleveland school system.

3919. Noland, Ralph W. "Practice in Indiana." *Heat and Ven* 27:74-5 S '30

States briefly the laws concerning heating and ventilation of schools and notes some practices.

3920. Otis, Gerald E. "Practical requirements for schoolroom ventilation." *Aerologist* 7:8-12 Ja '31

Discusses the need for air motion and the proper ventilation of schools. Humidity and removal of dust and odors are also considered.

3921. Ott, O. W. "Practice in Los Angeles." *Heat and Ven* 27:75-6 S '30

Presents the heating and ventilation practices in the schools of Los Angeles, where the majority of schools use fuel oil.

3922. Parks, Burritt A. "Specification writing for heating and ventilating installations." *Heat and Ven* 26:58-9; 68-9, 72; 68-71 Ja, F, Mr '29

Gives a number of instructions for the preparation of specifications so that misunderstandings may be avoided.

3923. Paschen, Christian P. "Man and the fan." *Aerologist* 6:5-9 Mr '30. il

Discusses the importance of the fan in ventilation in an age in which man is largely an indoor creature. Illustrates its use in different buildings.

3924. Phelps, H. R. "General ventilation of public buildings." *Sheet Metal Worker* 21:542-3 S 5 '30

Detailed description of ventilation provisions for auditorium, toilets, chemical laboratories, and kitchens.

3925. Pierson, Paul I. "Modern ideas of ventilation." *Chicago Sch J* 10:125-7 D '27

3926. *Plumbers and Heating Contractors Trade Journal.* "A practical method of ventilating schoolrooms." *Plumbers and Heat Contr Trade J* 85: D 15 '28

A discussion by S. R. Lewis, consulting engineer, on the different methods for ventilating classrooms, including window ventilation, radiator locations and flue arrangements.

3927. "A central heating plant for three schoolhouses." *Plumbers and Heat Contr Trade J* 86: Ja 15 '29

A discussion by T. N. Thomson, consulting engineer and technical editor, on the design and installation of a steam heating central plant for three school buildings, including a piping layout in the boiler room, the underground mains, and installation details.

3928. "Schoolhouse heating and ventilating practice." *Plumbers and Heat Contr Trade J* 87: N 1 '29

A review by Charles L. Hubbard, consulting engineer, of the old and new requirements in heating practice and ventilation with emphasis on split and key-room systems, including fan and air duct systems, conditioning, automatic regulation, etc.

3929. "The development of radiator heating." *Plumbers and Heat Contr Trade J* 90:30-4 Ja 1 '31. plans, il

A comparison of radiators and the story of the development of water and steam heating equipment and the scientific and commercial principles that have influenced its development.

3930. "Some profitable applications of automatic temperature control." *Plumbers and Heat Contr Trade J* 90:16-17, 31 My 15 '31. plans

Discusses the correct methods of using different types of automatic temperature control. Among these are remote hand, air and spring, and accumulator controls.

3931. "Hints on ventilating stuffy school room." *Plumbers and Heat Contr Trade J* 91:32-3 Jl 15 '31. plans

Answers a question about the ventilation of a ground floor room peculiarly located and presenting some difficult problems.

3932. "Placement, style and connections for modern concealed radiation." *Plumbers and Heat Contr Trade J* 91:10-11, 61 Ag 1 '31. plans, il

Gives the characteristics of heat delivery for both steam and hot water systems. Also discusses the trend toward concealed radiation.

3933. *Plumbing and Heating Contractors Trade Journal.* "Don't overlook the sleeping giant, panel heating." *Plumbing and Heat Contr Trade J* 92:31-2 Ja 15 '32. plans

Discusses the possibilities of panel heating and compares its cost with that of other systems.

3934. "New and improved products." *Plumbing and Heat Contr Trade J* 92:114-15 Ja 15 '32. il

Describes briefly a number of devices among which are air conditioners, water heaters, and electric dishwasher-sinks.

3935. *Power Plant Engineering.* "Heating and ventilating a large high school." *Power Plant Eng* 31:1050-2 O 1 '27

Description of how unit heaters and new ventilating equipment maintains proper temperatures and fresh air in the new Cleveland Heights High School.

3936. Robb, J. M. "The management of a large school heating and ventilating plant." *Am Sch Bd J* 78:56, 152, 154, 157-8, 168, 171 My '29

Gives 152 paragraphs of instruction for janitors relative to heating and ventilating.

3937. "Heating analysis for school administrators." *Nat Council on Schoolhouse Construction* (Proc of 8th annual meeting) 1930:37-51
Discusses the function of heating, presenting three prime factors. Describes a properly insulated building. Discusses the janitor's relation to the heating service.

3938. "Trends in school heating and ventilation." *Am Sch Bd J* 82:83, 144, 147-8 Ja '31
Lists the changes coming about in the field of school heating and ventilation, such as the passing of the central fan, the increasing use of unit ventilators and corridor venting, and the use of stokers, oil burners, and better building insulation for greater economy and service.

3939. "School ventilation: principles and practices." *Am Sch Bd J* 84:94, 96 Ja '32
A significant criticism of the final report of the same title of the New York Commission on Ventilation.

3940. *Sanitary and Heating Engineering.* "Radiation factors with insulation." *Sanitary and Heat Eng* 107:619-20 Ag '28
Tells of the development, by Illinois Master Plumbers Association, of a new method of figuring radiation, dividing building insulation into three classes with a single coefficient for each class.

3941. "Mechanical stokers are fuel savers." *Sanitary and Heat Eng* 107:687 Ag '28. il
Description of the "mechanical fireman."

3942. Scherer, Francis R. "Experimental work in ventilation in Rochester." *Nat Council on Schoolhouse Construction* (Proc of 8th annual meeting) 1930:51-5
Gives the findings of some experimental work in ventilation in the Rochester system. Describes the Danforth system.

3943. Schmidt, H. W. "Mechanical ventilation." *Am Educ Digest* 47:250-2 F '28
Presents the problem of ventilation, discusses the waste that has been and is being made in this connection, and suggests some worthwhile policies.

3944. "Air conditioning in the Wisconsin schools." *Heat and Ven* 25:58-60 N '28
Discussion of the Wisconsin Heating and Ventilating Code and its practical application in the schools.

3945. "After your school plans are made." *Heat, Piping and Air Cond* Je '30

3946. "School ventilation—a dialogue." *Heat and Ven* 27:93-6, 112 S '30
A discussion of air conditioning in general.

3947. Schmidt, Hans. "School-building ventilation." *Am Sch Bd J* 76:49-50, 104, 106 Mr '28
A presentation of what constitutes comfort and general standards to be applied in assuring this in the matter of ventilation. Cleanliness, leakage, and consistent control are considered.

3948. *School and Society.* "The ventilation of schools." *Sch and Soc* 26:549 O 29 '27
Announcement of the appointment of Dr. Rufus Cole as a member of the New York Commission on Ventilation.

3949. "The ventilation of schools." *Sch and Soc* 30:851-2 D 21 '29
Brief summary of the report of the study conducted in 1926-1927 by the New York Commission on Ventilation.

3950. *School Executives Magazine.* "Correct school room humidity." *Sch Executives M* 51:71 O '31
Comments upon the report of a committee of the American Society of Heating and Ventilating Engineers fixing the limits of the "comfort zone" for varying degrees of humidity.

3951. *School Life.* " 'Natural' ventilation conduces to pupils' health." *Sch Life* 14:109 F '29
Brief conclusion from a study of some Syracuse, New York, schools by the New York Commission on Ventilation.

3952. *School Science and Mathematics.* "Dividends on health assets." *Sch Sci and Math* 30:1067 D '30
Discusses health training in our schools and its relation to heating and ventilation.

3953. Severns, William H. "Estimating radiation more accurately." *Sanitary and Heat Eng* 107:712, 714 S '28
Gives typical problems, showing the application of the Mills rule for estimating radiation.

3954. *Sheet Metal Worker.* "Heating portable school buildings." *Sheet Metal Worker* 19:751, 757 N 16 '28. diag
Plans and details of forced air heating and ventilation of Larchmont Overflow School, Cleveland, Ohio.

3955. "Large schools ventilated by wind operated exhaust system." *Sheet Metal Worker* 22:519-20, 528 S 4 '31. il
Brief description of the ventilating system in the 300-capacity Nightingale-Bamford School, a private grade school in New York City. Also detailed description of the same type system in the Kips Bay Boys' Club building.

3956. "Another wind-activated ventilating system giving complete satisfaction." *Sheet Metal Worker* 23:133-4 Mr 18 '32. il
A description of the ventilating system of the St. Anthony's Parochial School of New York City.

3957. Smith, Aden E. "Removing offensive odors from toilet rooms by ventilation." *Plumbers and Heat Contr Trade J* 90:20-2 F 15 '31. plans, il
Discusses the need for and methods of securing effective ventilation of toilets.

3958. Smith, V. T. "Published opinion on school ventilation." *Am Sch Bd J* 81:53-4, 142; 51-2 Jl, S '30; 83:51-2 Ag '31; 84:92 Mr '32
An excellent review of the important literature in the field of school ventilation. Research in the field is summarized and a comprehensive bibliography is included.

3959. Stangle, William Hull. "Air conditioning." *Heat and Ven* 28:76-80 Ja '31. plans, il
Discussion of types of fans and drives for air distribution.

3960. "Outlets and inlets." *Heat and Ven* 28:62-4 Mr '31. plans, il
Discussion of properly designed openings for admission and outlets of air in rooms.

3961. Stark, E. B. "School ventilation in Oak Park and Maywood." *Aerologist* 6:21-2 F '30
Discusses the Doctor's dissertation of Russell L. C. Butsch on *A comparative study of the effects of different types of school-building ventilation on the health of pupils.* These two schools receive especial attention in the study.

3962. Steel, Ernest W. "School ventilation." *Am Mercury* 18:193-5 O '29; commented on under the title "A layman's view of school ventilation." *Am Sch Bd J* 80:84 Ja '30
Points out the need for readjustment of concepts concerning school ventilation due to recent studies. Points out the two strongest objections to natural ventilation and meets these objections.

3963. Tapp, Harry F. "Commercial oil burning." *Am Arch* 132:483-8 O 5 '27. il
Discusses the use of oil for heating purposes.

3964. Terman, L. M. "Physiology of ventilation." In *Hygiene of the school child,* p. 148, 167. Houghton, Mifflin Co., Chicago, 1929
Discussion of the need for ventilation based on the physiology of respiration.

3965. Thomson, T. N. "Ripping out furnaces and installing a steam heating system in a 16-room school building." *Plumbers and Heat Contr Trade J* 83:674-7 O 1 '27

Description of methods employed in installing a new heating plant in the Potter Street School building at Utica, New York.

3966. "Unit ventilators and welded steam lines for the modern high school." *Plumbers and Heat Contr Trade J* 91:13-14, 42 O 1 '31. plans, il

Describes the ventilation, heating, and refrigeration systems in the million-dollar high school at Kenneth Square, Pennsylvania.

3967. "Ventilating the brains of the next generation." *Plumbing and Heat Contr Trade J* 92:40-3 Ja 15 '32. plans, il

Offers information on several divisions of ventilation installation work.

3968. Vernon, H. M. "Some new methods of heating buildings." *J Ind Hygiene* 12:281-9 S '30. il

Describes hot water panel heating, electric panel heating, influence of radiant heat on sensations of warmth, and underfloor heating especially in schools in Great Britain.

3969. Vernon, H. M.; Bedford, T.; and Warner, C. G. *A study of heating and ventilation in schools.* Great Britain Industrial Health Res Bd, Medical Res Council, Report no. 58. His Majesty's Stationery Office, London, 1930. 72 p.; reviewed in *J Am Medical Assn* 94:1712 My 24 '30; abstract in *British Medical J* 1:606-7 Mr 29 '30 and also in *Sch and Soc* 31:540-1 Ap 19 '30

Report of a rather detailed study of the effects of various types of schoolroom heating, including ceiling, floor, panel, and stove methods in English schools.

3970. Walker, J. H. "A new slant on school ventilation." *Heat and Ven* 26:59 Jl '29

A criticism of installation and production of ventilation equipment, and suggestions for improvement.

3971. West, Perry. "Controlled indoor atmosphere: highlights in its development." *Heat, Piping and Air Cond* 1:649-53 D '29

3972. Westinghouse Electric and Manufacturing Company. *The selection and application of electrical equipment for heating and ventilating systems.* Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa., 1929. il, 12 p

Tells of types of control, of motors, and of the proper installation of the motors.

3973. White, F. Manson and Keller, Jay H. "The heating and ventilating of school buildings." *Am Sch and Univ* 1931-32:90-1

Discusses two modern methods and makes suggestions for certain installations.

3974. Willard, A. C. "Schoolroom ventilation." *Aerologist* 5:5-6, 46 F '29

Discusses the need for the proper ventilation of the average schoolroom and gives the essential factors of good ventilation. Also discusses source, amount, and method of supplying the air.

3975. "Schoolroom ventilation." *Heat, Piping and Air Cond* 1:439-40 S '29

3976. Winslow, C.-E. A. "Making the school safe for the child." *El Sch J* 28:649-58 My '28

A discussion of ventilation, lighting, and sanitation in relation to the child's welfare in school.

3977. Winslow, C.-E. A., chairman. "Relation between respiratory illness and air conditions in certain Syracuse schools." *Sch and Soc* 26:785-8 D 17 '27

Report of results of a study of ventilation in schools made by the New York Commission on Ventilation in 1926-1927.

3978. *School ventilation—principles and practices.* Columbia Univ, Teach Col, Bur of Publ, New York City, 1931. bibliog, 73 p

This is the final contribution of the New York Commission on Ventilation. This is a summary of the commission's investigations and some conclusions drawn.

3979. Wood, Thomas D. and Hendriksen, Ethel M. "The thermometer and school." *Nat Educ Assn J* 16:258 N '27

States that a cool room, air currents, and humidity are the three main factors in ventilation. During winter weather the schoolroom should have a lower temperature than in summer.

3980. "Ventilation of indoor recreation rooms." *Playground* 21:420-1 N '27

Discussion of the need for and suggestions as to how to secure proper ventilation of recreation rooms.

3981. "Checking up on Johnny's cold." *Hygeia* 6:30 Ja '28

A discussion of proper school ventilation and its relation to health.

3982. Wright, Richard. "Automatic room temperature control." *Sanitary and Heat Eng* 107:466 Je '28

Description of control valves to be used on radiators to control room temperature automatically by means of thermostats.

Cross-index

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TOILETS AND PLUMBING

3983. Alberene Stone Company. *Spandrels.* Alberene Stone Co., New York City, 1929. plans, il, 21 p

Tells of the use of spandrels of soap stone. Lists the characteristics of good partitions in toilets and shows other uses for this material about a school building.

3984. Alt, Harold L. "Pipe sizes—hot and cold water demands." *Domestic Eng* 134:40-5 F 7 '31. charts, il

A discussion of the relation of the water demand to pipe sizes and how this relation is figured. A chart shows the approximate maximum water demands for a number of fixtures in schools and other types of buildings.

3985. Andersen, Erik A. "Plumbing standards and their relation to school efficiency." *Am Sch and Univ* 1931-32:96-100. il

Discusses this from the point of view of the health needs of the pupils and how to meet them.

3986. Barr, S. M. "Toilet room ventilation." *Domestic Eng* 137:37-8 D 26 '31. plans, il

Describes ways in which nauseating odors are removed from the modern toilet room.

3987. Davidson, Harry. "Toilet room ventilation." *Domestic Eng* 134:64, 66, 69 F 21 '31. plans

Tells of the elimination of odors in the toilets of a rural school.

3988. *Domestic Engineering.* "Raised rear vent." *Domestic Eng* 133:65-7, 123-5 D 27 '30. plans, il

Summary of replies to a questionnaire sent to contractors asking their opinions of raised rear vent water closets.

3989. "A study of handwashing facilities in American schools." *Domestic Eng* 136:38-40, 132-4 S 5 '31. il

Report of a study of these facilities in 145 representative schools in 15 states, representing an enrollment of 124,088 pupils.

3990. "Clock flushes fixtures." *Domestic Eng* 138:28 F 20 '32. plans, il

Description of a urinal flushing system operated by a combination of electric clock and thermostatic relays and valves.

3991. Dunnells, Clifford G. "Plumbing and heating in new construction." *Sanitary and Heat Eng* 107:24, 59-60 Ja '28

Deals with relationships that should exist between owner, architect, contractor, plumber, and heating and ventilating contractor.

3992. Grant, Nell May. *Hand washing facilities and their utilization in the elementary schools of Los Angeles.* Master's Thesis, Univ of Southern California, Los Angeles, 1930. 185 p.; abstract in *Annotated index of theses and dissertations in education,* p. 34. Univ of Southern California, Sch of Educ, Los Angeles, 1930

Report of an investigation of facilities and their use in 265 schools.

3993. Hardenbergh, W. A. "Don'ts for septic tank installations." *Domestic Eng* 137: 56, 58, 60, 128-9 N 28 '31. plans, il

Gives a number of valuable bits of instruction for use in installing septic tanks.

3994. Jean, Sally Lucas. *Handwashing in schools.* Sch Service of Cleanliness Inst, New York City, 1931. 20 p

Report of a study of equipment and supplies for handwashing in public schools.

3995. Kothe, O. W. "Closet material, design, installation." *Sanitary and Heat Eng* 106:782, 784, 810 O '27. il

Gives diagrams and discusses various types of materials and installation.

3996. McGonegal, A. R. "Sanitation for school buildings." *Arch Forum* 48:463-8 Mr '28

Discussion and evaluation of many types of toilets, drinking fountains, drains, lavatories, flushes, fire protection, piping, sewage, pumps, and tank equipment.

3997. *"Plumbing and the school." *Sanitary and Heat Age* 109:30-7 Ap 15 '30. il

Discussion of plumbing problems of materials, nipples and fittings, piping scheme, water supply, ventilation, fastenings, proportioning, quality of fixtures, and drinking fountains.

3998. Moffett, T. F. "Solving the modern high school's plumbing problems." *Plumbers and Heat Contr Trade J* 91:8-10, 31 Ag 15 '31. plans

Tells of the plumbing in the high-school building at San Antonio, Texas. Outstanding features are the interior downspouts, acid-proof waste lines, refrigerated drinking water, and sprinklers.

3999. *Nation's Schools.* "Hand washing facilities as an aid to health education." *Nation's Sch* 7:56 Ja '31

Results of a study of reports by 435 superintendents on types of soap and towels used.

4000. *Plumbers and Heating Contractors Trade Journal.* "A dozen rules for the installation of sanitary drinking fountains." *Plumbers and Heat Contr Trade J* 88:12 F 15 '30

Lists 12 rules for the installation of fountains. These were obtained from the American Public Health Association.

4001. "Estimating gas-fired equipment to meet hot water demand." *Plumbers and Heat Contr Trade J* 89:19-20 S 15 '30

Among other things, shows capacity of hot water equipment needed to supply different fixtures in school buildings and basic factors upon which gas burning systems may be calculated.

4002. Ralston, Louis T. M. "New data give practical guide to figure number of fixtures in office buildings, schools, and clubs." *Domestic Eng* 134:40-2, 157 Ja 10 '31. il

Gives the results of a special investigation and information on how to estimate the number and proper arrangement of plumbing fixtures.

4003. Schmidt, H. W. "Sanitary conveniences in schools." *Am Sch Bd J* 80:53-6, 162, 164, 166 Ja '30

After a brief review of the literature in the field the author presents his findings in a study of 80 Wisconsin schools as to (1) location of the toilet rooms, number and type of fixtures, and enrollment of school, and (2) number using each type of fixture at each period.

4004. *Thomas, Minor Wine. *Public school plumbing equipment.* Columbia Univ, Teach Col, Contr to Educ no. 282, New York City, 1928. 128 p

A study of plumbing equipment needs of schools and some criteria for determining standards.

4005. "Modern plumbing equipment for educational buildings." *Am Sch and Univ* 1928-29:61-5

Discusses trends in construction and installation of plumbing equipment, based on a study of the literature dealing with the subject and on a study of new goods coming on the market.

4006. "Heights of plumbing fixtures for public school buildings." *Am Sch Bd J* 79:46, 141 O '29

A study of proper adjustment of plumbing fixtures in school buildings.

4007. "Plumbing sanitation for schools." *Arch Forum* 55:765-8 D '31. plans, il

Discusses the planning of plumbing fixtures and stresses the proper arrangement of toilets and drinking fountains. A table suggests the number of fixtures necessary for schools of different sizes.

4008. Turner, C. E. and others. *Hand-washing facilities in schools.* Metropolitan Life Insurance Co., Sch Health Bur, Monograph no. 3, New York City, 1928. 11 p

This study of the adequacy of hand-washing facilities in 404 typical schools located in 22 states and the Dominion of Canada was made under the direction of a special committee of which C. E. Turner was chairman, the detailed work being done by special students in the department of biology and public health of the Massachusetts Institute of Technology.

4009. U. S. Public Health Service. "Essential features in the design of sanitary drinking fountains." *Pub Health Report* 46:170-1 Ja 23 '31

States features of drinking fountains adopted by the conference of State Sanitary Engineers in 1930.

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THE WATER SUPPLY AND SEWAGE DISPOSAL

4010. *American City.* "'Sanitary' drinking fountains too often are not." *Am City* 41:109 D '29

Lists standards for drinking fountains set by the American Public Health Association.

4011. *American Journal of Public Health.* "Essential features in the design of sanitary drinking fountains." *Am J Pub Health* 19:1223-8 N '29

Report of the Committee on Plumbing of the American Public Health Association. Sets out the essentials of good fountains.

4012. *American School and University.* "How sanitary drinking fountains should be made and operated." *Am Sch and Univ* 1930-31:96
Lists the considerations for construction and operation of drinking fountains suggested by the American Public Health Association.

4013. Brown, Jean Collier. "A study of sanitary drinking fountains." *Am Sch Bd J* 83:34 O '31
Studies show that many diseases may be transmitted by certain types of drinking fountains. Presents a list of standards adopted by the American Public Health Association.

4014. Correll, Marie. "Those dangerous drinking fountains." *Hygeia* 9:1091-2 D '31
Sets up some well-developed standards for drinking fountains.

4015. Hall, H. T. "How to estimate water consumption for special jobs." *Domestic Eng* 135:40-4, 148-9 My 2 '31. charts, il
Discusses the consumption of both cold and hot water in a number of institutions, among which are schools. Radiation losses is one item discussed.

4016. Harris, J. F. "Proper installation of septic tanks." *Sanitary and Heat Eng* 106:860, 862, 902 N '27
States that successful operation depends largely on carefully following the methods developed by the sanitation experts.

4017. Hart, Chester. "Vertical stream bubblers modernized." *Nation's Sch* 8:102 O '31. il
Description of a bubbler designed to remove the unsanitary features of the vertical bubbler.

4018. Mott, Paul William. *The problem of water and equipment in the high school.* Master's Thesis, Leland Stanford Junior Univ, Stanford University, Calif. 1930

4019. Myers, Garry Cleveland. "Making drinking water safe for school children in the rural school." *Am Sch Bd J* 82:105 Ap '31
Discusses dangers lurking in drinking water and suggests precautions that should be taken.

4020. *School Life.* "State supervision of school sanitation." *Sch Life* 13:127 Mr '28
States where the responsibility for supervision of sanitation of schools is placed in certain states of the United States.

4021. State of Alabama. *The use and construction of the concrete septic tank.* State Bd of Health, bul no. 8-1, Montgomery, Ap '29. 22 p
Discusses the care of septic tanks and describes their construction under the heads of location, excavation, forming, placing the steel and piping, and mixing and pouring the concrete, and indicates the type of tanks to be selected for schools.

4022. University of New Hampshire. *Building a septic tank for the farm.* Univ of New Hampshire, Ext Service, Ext Circular no. 98, Durham, F '29. 7 p
Detailed description of the construction of a septic tank which will prove satisfactory not only for the farm home but also for the small rural school.

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LIGHTING, NATURAL AND ARTIFICIAL, AND SPECIAL ELECTRICAL EQUIPMENT

4023. *American School Board Journal.* "The lighting system in public schools." *Am Sch Bd J* 79:102 Jl '29

Excerpts of the speech of Miss Harriet B. Cook, assistant director of public health at Red Bank, New Jersey, on the part that lighting is playing in the elimination of eye defects in children.

4024. "The effect of ultra-violet rays on school children." *Am Sch Bd J* 81:64 O '30

States that tests at Greets Green School, West Bromwich, England; Birmingham, Alabama; Overbrook, Pennsylvania; and Maumee, Ohio, show that children gain significantly more, are absent less, and obtain higher scholastic rating when schools are equipped with ultra-violet transmitting glass.

4025. "An Illinois school equips field for night football." *Am Sch Bd J* 81:70 O '30. il

Describes the plan used at Westville, Illinois, for equipping a field for night football, at a cost of $700.

4026. "Night high school football. The experience at Aurora, Illinois." *Am Sch Bd J* 81:43-4 N '30. il

Describes the lighting units used for night high-school football, giving the cost of the same.

4027. "Adjusting classroom shades." *Am Sch Bd J* 84:76 Mr '32

A list of six suggestions made by the New Jersey Education Bulletin on adjusting shades in classrooms.

4028. Beal, A. F. "Effect of clouds on daylight illumination and on daylight ratios." *Studies in natural illumination in schoolrooms, Pt. III.* U. S. Pub Health Service, Pub Health Bul no. 188, N '29. 128 p

Summary of about 45,000 observations of daylight illumination made by the U. S. Public Health Service in a school building in Hagerstown, Maryland, during the school year 1923-1924. From the results of the study a generalized formula based upon the far-near-sky-vault ratio is suggested, by which it is believed that it will be possible to compute or forecast the illumination at any point in a room for any combination of environmental obstructions.

4029. Curtis Lighting, Incorporated. *Planned lighting.* Curtis Lighting, Inc., Chicago, 1932. il, 26 p.; reviewed in *Arch Forum* 56:68 (adv) Ja '32

A manual for planning illumination. Gives detailed data on wattage capacities. Shows the effect of proper lighting upon architectural appearance.

4030. Dobbins, William K. "Lighting problems of the evening industrial class." *Ind Educ M* 32:338-40 Ap '31. il

Compares direct and indirect lighting and sets minimum standards for efficient lighting. Tells how to determine the utilization constant.

4031. Dressler, Fletcher B. and Southerland, R. H. "The orientation of classrooms of school buildings." *Nat Council on Schoolhouse Construction* (Report of

7th annual convention) 1929:83-96. mim; also *Peabody J Educ* 7:3-12 Jl '29

Report of a study to determine (1) the relative total number of hours of interference by direct sunlight on pupils' desk tops when the window shades are not drawn; (2) the relative amount of floor space illuminated by direct sunshine before, during, and after school hours; and (3) the relative necessity for the use of window shades to prevent direct sunlight from falling on desk tops.

4032. Eddy, Walter H. "The use of ultra-violet light transmitting windows." *Am J Pub Health* 18:1470-9 D '28

States that the window glass tested admitted "enough ultra-violet in winter months to heal or prevent rickets if the weather is clear and exposure long enough"; but "only that part of the room directly in the path of the rays receives this benefit."

4033. *Electrical Review.* "School and library lighting." *Elec R* 109:176 Jl 31 '31

4034. Eyesight Conservation Council of America. "Code of lighting schools interpreted." *Mich Arch and Eng* 7:123 O '28

Calls attention to the demands for higher standards of illumination for school buildings as stressed in the popular interpretation of the Code of Lighting School Buildings. This bulletin, entitled "School lighting as a factor in sight saving," was prepared by the sectional committee on school lighting for the American Engineering Standards Committee and is published for the committee as *Eyesight Conservation Bulletin*, no. 6, by the Eyesight Conservation Council.

4035. Frandsen, D. J. "The artificial lighting of schools." *Arch Forum* 48:459, 462 Mr '28

Presents a detailed study on the problem of artificial lighting. Discusses standards of intensity, diffusion and glare, distribution, type of fixtures, indirect lighting, semi-indirect lighting, direct lighting, ventilating the fixtures, globe sizes, and spacing of luminaries.

4036. Frank Adams Electric Company. *The control of lighting in theaters.* Frank Adams Electric Co., bul no. 42, St. Louis, Mo., 1928. plans, il, 66 p

Among other things discusses stage and auditorium lighting and illustrates different ways of securing good lighting.

4037. Greene, Charles E. *Telephone service in high schools.* Pub Sch, Dept of Res, Denver, Colo., 1930. 65 p. ms

A study of the phone service on the local school exchange and the phone situation in other cities. Recommends a certain standardization for the sake of economy and efficiency.

4038. Harrison, Ward and Weitz, C. E. *Illumination design data for industrial and commercial interiors.* General Electric Co., Nela Park Engineering Dept, Cleveland, Ja '30. plans, tables, il, 36 p

Presents illumination design known as the "lumen method." Considers the location of outlets, foot-candles required, reflector characteristics, and lamp size. Gives tables showing wire sizes required.

4039. Hart, Chester. "Improved lighting fixtures that will benefit the school." *Nation's Sch* 8:102, 104 N '31

Maintains that the one-piece enclosing globe for semi-indirect lighting, with a minimum of depreciation and maintenance, has proved to be the most satisfactory type of fixture for uniform lighting.

4040. "Modern metal windows and their advantages." *Nation's Sch* 8:104, 106 N '31. il

Description of the Sealair in-swinging window.

4041. Hathaway, Winifred. "The well lighted schoolhouse—a coöperative effort." *Nation's Sch* 6:55-8 Jl '30

Shows the need for and methods of conserving the eyesight.

4042. "Sight-saving classes." *Am Sch and Univ* 1930-31:322-4. il
Discusses equipment in relation to sight of pupils. Lighting in this relation is also discussed.

4043. Holophane Company, Incorporated. *The most efficient lighting for schools and colleges.* Holophane Co., Inc., New York City, 8 p.; reviewed in *Arch Forum* 56:68 (adv) F '32
Gives table of lighting intensities and discusses lighting for various areas such as auditoriums, blackboards, laboratories, libraries, etc.

4044. Hopkinson, George M. "Natural and artificial lighting of schoolrooms." *Am Sch Bd J* 81:41-2, 135 O '30. il
Report of an experiment to determine the amount of window area needed. A study of the combination of natural and artificial lighting.

4045. *Hygeia.* "Proper lighting needed in school, home and office." *Hygeia* 9:1062 N '31
Discusses the responsibility of the architect for making proper provisions for lighting, both natural and artificial.

4046. *Illuminating Engineer.* "Natural lighting of schools." *Illum Eng* 24:155-6 Jl '31

4047. "Artificial lighting of schools." *Illum Eng* 24:157-8 Jl '31; reprint in *Gas J* 195:377-8 Ag 12 '31

4048. *Illuminating Engineering Society.* "New safety booklet on home and school lighting." *Illum Eng Soc* 25:206-7 Mr '30
Reviews a pamphlet on illumination requirements prepared by the Committee on Light and Safety.

4049. *Ives, James E. "A review of the current practice in the lighting of school buildings in the United States." *Am Sch Bd J* 78:140, 142, 144 My '29; also *Am Sch and Univ* 1929-30:286-9; also *Pub Health Report* 43:3313-18 D 14 '28
Gives information from 39 states and nine cities regarding color of walls and ceilings, finish and color of woodwork, type of natural lighting, preferred exposure, dimension of classrooms, ratio of areas, type and location of windows, character of shades, artificial lighting, inspection maintenance, and glare.

4050. *Journal of Education.* "The natural lighting of schools." *J Educ* (London) 63:833-5 D '31
Report of a sub-committee appointed by the Technical Committee of the Illuminating Engineering Society. Some fundamental principles of lighting are given and some recommendations for school lighting are made.

4051. "Artificial lighting of schools." *J Educ* (London) 63:835-6 D '31
Report on artificial lighting of schools made by the Technical Committee of the Illuminating Engineering Society. Some recommendations for school lighting are made.

4052. *Journal of the American Medical Association.* "The lighting in primary schools." *Am Medical Assn J* 92:2036 Je 15 '29
A discussion of the views of scholars of the Netherlands upon this subject.

4053. Kantack, Walter W. "Fundamentals in providing for good lighting." *Am Arch* 140:48-51, 120, 124 S '31. il
Discusses different types of lighting fixtures and a number of problems that present themselves relative to lighting.

4054. Keller, Paul G. W. "Nutrition and the ultra-violet ray." *Am Sch Bd J* 77:98, 100 N '28
A discussion of the relation of lighting and nutrition as a factor in the promotion of health. Application to the school is made.

4055. Lieb, John W. "Some engineering aspects of electric lighting." *Illum Eng Soc* 25:637-62 S '30. il

Gives a table showing the recommended ranges of horizontal foot-candles for school-building lighting.

4056. Linn, H. H. "Reducing electricity costs for public schools." *Am Sch and Univ* 1931-32:173-5

Considers the reduction of consumption and of rates. Also suggests that schools generate their own electricity.

4057. Logan, H. L. "Lighting the classroom." *Arch Rec* 70:54-5 Jl '31. il

Discusses artificial lighting of rooms and gives a table of average daylight intensities for summer.

4058. Louthian, Lawrence. "The control of light in classrooms." *Am Sch Bd J* 76: 77, 165-6 Ja '28

Quotes light standards given by a number of societies, then discusses these at some length.

4059. Martin, A. J. "Schoolroom daylighting." *Am Sch Bd J* 82:65, 138 My '31

Discusses the effect of different physical features of buildings upon the natural lighting that may be obtained.

4060. Metropolitan Life Insurance Company. *The lighting of schools.* Metropolitan Life Insurance Co., Health Bul for Teach, no. 9, p. 1-4, New York City, Mr '30

A discussion of the proper lighting of school buildings and its relation to the work of the child.

4061. Payson, Verna. "The lighted school building." *J Home Econ* 20:796-800 N '28

A discussion of night school work for adults and the equipment necessary.

4062. *Permaflector Lighting.* "Lighting schools and colleges—a national problem." *Permaflector Lighting* 4:1-2 Jl '30

Discusses proper school lighting.

4063. "What constitutes good lighting for schools." *Permaflector Lighting* 4:3-4 Jl '30

Discusses lighting, stressing adequacy, glare, distribution and diffusion.

4064. "Better light—higher grades." *Permaflector Lighting* 4:5-12 Jl '30. plans, il

Discusses lighting for offices, rooms of different types, libraries, corridors, galleries, and museums. Sky lighting is also discussed.

4065. "Lighting for athletics and recreations." *Permaflector Lighting* 4:16-20 Jl '30. plans, il

Discusses the lighting of gymnasiums in general and of courts for different games.

4066. "Night lighting for outdoor sports." *Permaflector Lighting* 4:20-2 Jl '30. plans, il

Discussion of the lighting of football and baseball fields and of courts for other games, and also of the lighting of parking spaces.

4067. "Accentuating the beauty of the school at night." *Permaflector Lighting* 4:23 Jl '30. il

Discussion of flood lighting of school buildings.

4068. Pleasant, J. L. *Eyesight conservation and schoolhouse lighting*, p. 37-63. Master's Thesis, Indiana Univ, Bloomington, 1928

Discussion of type and amount of lighting necessary for good school conditions. The author sets out a code for lighting school buildings.

4069. Powell, A. L. "Our responsibility for the pupil's vision." *Nation's Sch* 1:57-60 Ja '28. il

Discusses the need for proper lighting and the use of different systems in getting the best results.

4070. *"Practical suggestions on the artificial lighting of school buildings." *Am Sch and Univ* 1928-29:37-42

Shows the cost of poor lighting. Suggestions for proper distribution of lighting facilities are made, as are also suggestions for selection of equipment.

4071. Powell, A. L. and Frandsen, D. J. *Lighting of schools and gymnasiums.* New Jersey Edison Lamp Works of General Electric Co., Harrison, N. J., 1928. il

States that proper lighting of the schoolhouse should be considered not an expense but an economy. A few of the desirable qualities of illumination are summed up in this pamphlet, accompanied by illustrations with data which show examples of the principles as applied to typical buildings. Intensity, diffusion, and distribution of light are taken up, followed by general and specific considerations of the classroom, corridors, and miscellaneous rooms.

4072. Ross, Nelson C. "Lighting and electrical systems for school buildings." *Arch Forum* 55:743-52 D '31. plans

Considers artificial lighting of different parts of the building, among them being the auditorium, gymnasium, cafeteria, entrances, corridors, and classrooms. General electrical equipment for the laboratories is discussed. Shops and radios are also mentioned.

4073. Scherer, Francis R. "Natural and artificial illumination of classrooms and corridors." *Nat Council on Schoolhouse Construction* (Report of 7th annual convention) 1929:38-40. mim

Brief history of the development of a school lighting code.

4074. *School and Society.* "Plans for a survey on eye strain." *Sch and Soc* 34:221-2 Ag 15 '31

Gives the plan for a survey which will take into consideration proper school lighting.

4075. *School Executives Magazine.* "Good light for the school room." *Sch Executives M* 49:81 O '29

Description of lighting in a model schoolroom designed by the Westinghouse Company and located on the seventh floor of the Grand Central Palace, New York City.

4076. Scott, Cecil W. "Electric time systems for school use." *Sch Executives M* 51:14-15, 34-5 S '31

Presentation of the advantages and disadvantages of electric impulse and synchronous motor systems of time signals.

4077. "Effective telephone equipment for public schools." *Sch Executives M* 51:220-1 Ja '32

Report of a study based upon 18 sets of architectural specifications, a review of periodical literature on the subject, and explanatory printed material put out by manufacturers and thru conferences with representatives of telephone equipment companies.

4078. *Sierra Educational News.* "Scientific school lighting in California." *Sierra Educ News* 24:19-20 Je '28

Discussion of the cost of poor lighting and the story of how a California school achieved some good results from scientific lighting.

4079. *Survey.* "School windows." (ed) *Survey* 65:328-9 D 15 '30

Report of a Detroit experiment with ultra-violet transmitting glass, the results of which showed that such glass had no advantage over ordinary glass so far as health scores of children were concerned.

4080. Tang, K. Y. *A method of predicting illumination from light courts.* Ohio State Univ, Engineering Experiment Station, bul no. 47, Columbus, 1928. 26 p

Discusses the experiment conducted to investigate illumination from light courts of various sizes.

4081. *Theatre Arts Monthly.* "Descriptive data." *Theatre Arts Monthly* 15:620-1 Jl '31. plans

Discussion of stage lighting. Suggestions for footlights, borderlights, control boards, etc.

4082. Tuck, D. H. "Planned lighting for educational buildings." *Am Sch and Univ* 1931-32:82-3. il

Discusses the relation of lighting to general health and gives some rules for proper school illumination.

4083. *U. S. Public Health Reports.* "Studies in natural illumination in school rooms." *Pub Health Report* 45:68 Ja 10 '30

Short summary of Public Health Bulletin no. 188, on the effect of clouds on inside illumination.

4084. Wolf, Carl F. "Better illumination and electrification for school buildings by the adoption of standards." *Am Sch and Univ* 1930-31:59-64. plan, il

Story of the adoption by the Fresno, California, schools of the Standards of Illumination recommended by the American Institute of Architects.

4085. Yardley, R. W. "Lighting classrooms in Chicago." *Arch Rec* 70:64, 66 (adv) S '31. il

Discusses the lighting problem peculiar to Chicago because of its congested conditions.

4086. Zahour, Robert L. "Good illumination in the schoolroom." *Am Sch Bd J* 82: 69-70 Ja '31. il

This article gives the lighting standards for classrooms, special rooms, toilets, gymnasium, cafeteria, corridors, and shops, and gives many pointers on the proper installation of the lighting system.

4087. "Modern practice in school lighting." *Am Sch and Univ* 1932-33:39-41. il

Review of current lighting practice in classrooms, study halls, special rooms, libraries, and auditoriums. Predicts the increasing intensities of illumination.

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CLEANING FACILITIES AND JANITOR'S EQUIPMENT

4088. Adams, Arthur H. "The laundry problem of schools and colleges." *Am Sch and Univ* 1931-32:398-400

Discusses factors to be considered in planning a school laundry. Some possible cost savings are shown.

4089. American Laundry Machinery Company. *American laundry equipment.* American Laundry Machinery Co., Form 1270, Chicago, 1928. 35 p

Describes in some detail equipment for laundry work.

4090. *American School and University.* "The maintenance of clean and sanitary school plants." *Am Sch and Univ* 1932-33:115-18

Contains excerpts from *The School Plant—Its Construction, Maintenance and Sanitation,* one of the reports of the White House Conference on Child Health and Protection. This reference deals with the cleaning of school houses.

4091. *American School Board Journal.* "Rules governing school custodians." *Am Sch Bd J* 83:87 S '31

Rules and regulations of St. Joseph, Missouri.

4092. Barbee, F. H. "How Kansas City operates its school laundries." *Nation's Sch* 3:49-51 F '29

Story of the operation of seven laundries in seven high schools of Kansas City.

4093. Barnhill, O. H. "Pasadena's school laundry." *Am Sch Bd J* 77:64, 134 Ag '28

A statement of the cost of and service rendered by the school laundry.

4094. Butsch, Russell L. C. "Equipment, duties, and salaries of school janitors in Wisconsin." *Am Sch Bd J* 82:43-4, 127; 57-8 My, Je '31

Report of a study showing the activities of school janitors, the equipment provided for them, and salaries paid.

4095. Dalthorp, Charles J. "How to improve janitorial service in the small city schools." *Nation's Sch* 6:25-8 Jl '30

Discusses securing, training, and retaining efficient janitors. The real value of the good janitor to the school is discussed.

4096. *Engelhardt, N. L.; Reeves, Charles E.; and Womrath, George F. *Survey data book for public school janitorial-engineering service.* Bur of Publ, Teach Col, Columbia Univ, New York City, 1932. 75 p

An excellent guide to be used as an aid in using the Engelhardt-Reeves-Womrath score card for janitorial-engineering service.

4097. Foster, James E. "Provisions for sanitation and cleanliness in educational buildings." *Am Sch and Univ* 1929-30:61-3

Lists a number of factors which must be taken into account when planning sanitary facilities. Gives the Ohio building code and discusses a number of items of equipment.

4098. *Ganders, Harry Stanley. "The administration of personnel for school building operation." *Am Sch and Univ* 1928-29:152-6

Discusses the need for placing upon a scientific basis the operation and care of school buildings and equipment. Such subjects as the following are discussed: organization of personnel responsibility; selection and training of janitor-engineers; qualifications for promotion; service loads and service costs; and salary schedule.

4099. "General vacuum cleaning systems." *Nat Assn Pub Sch Bus Officials* (Proc of 19th annual meeting) 1930:165-70; also reported under the title "Central vacuum cleaning systems." *Am Sch Bd J* 81:50 Jl '30

Discusses the use of central vacuum cleaners and the effect of kinds of equipment and installation.

4100. Grill, George W. "The selection and training of school custodians." *Nat Assn Pub Sch Bus Officials* (Proc of 17th annual meeting) 1928:73-6

Discusses desirable characteristics for the men who are to care for school equipment.

4101. Hallett, Edwin S. "The janitorial training methods for the St. Louis schools." *Am Sch Bd J* 75:63, 128, 133 O '27

Description of the St. Louis plan for securing efficient janitorial service.

4102. Hollister, George B. "The function of a school laundry." *Am Sch and Univ* 1929-30:337

Discusses laundries operated by schools.

4103. *Martin, Ray L. and Hunsdon, N. S. *Instructors manual for training public school janitors and janitor engineers.* State of Texas, Dept of Educ, Bd for Voc Educ, bul no. 306, Austin, 1932. 35 p

Complete instruction manual for janitorial care of all parts of school buildings.

4104. Monroe, G. K. "The work of the school janitor." *Am Sch Bd J* 75:80, 82 N '27

Indicates clearly the place of the janitor in preserving cleanliness and safety in school buildings.

4105. *Nation's Schools.* "When the school should own and operate its own laundry." *Nation's Sch* 8:66-8 Ag '31. il

Points out the factors which should determine when a laundry would prove advantageous.

4106. *Plumbers and Heating Contractors Trade Journal.* "Stationary vacuum cleaning systems." *Plumbers and Heat Contr Trade J* 89:19-20 N 15 '30. plans

Tells of the value of the vacuum cleaning system and of its various uses. Particular attention is given to its use in cleaning swimming pools.

4107. Reeves, Charles E. "Promoting efficient janitorial service." *Nation's Sch* 7:37-42 Ap '31. il

Practical suggestions concerning the care of the school building and its equipment. Discussion of equipment for janitors. Standardized supply lists.

4108. "Cleaning and treating woodwork and furniture." *Nation's Sch* 8:43-6 Ag '31. il

Discusses such points as caring for walls and ceilings, repainting and revarnishing, and use of liquid cleaners.

4109. "Cleaning blackboards, erasers, and toilets." *Nation's Sch* 8:43-6 S '31
Suggestions for proper facilities and equipment for keeping toilets sanitary.

4110. Robinson, Erdis. "Standardizing the work and the pay of school custodians." *Sch Executives M* 50:18-20, 40 S '30
Report of a detailed study of the janitorial service in the Columbus, Ohio, schools.

4111. Rogers, James Frederick. *Sanitation of schools.* U. S. Office of Educ, Leaflet no. 1, Mr '30. 6 p
Discusses the following in relation to the school from the point of view of health: heating, ventilation, cleaning, lighting, toilets, playgrounds, and fire protection.

4112. State of Wisconsin. *School laws and rules of the state board of health relating to the sanitary care of schools and control and prevention of communicable diseases therein.* State Bd of Health, Madison, 1928. 24 p
Presents rules relative to water supply, ventilation, and toilets.

4113. Winspear, Clara Marie. *Mechanical cleaning service in public schools of large American cities.* Master's Thesis, Univ of Cincinnati, 1930. 78 p
A study of accepted mechanical standards for mechanical cleaning systems as taken from manufacturer's files and literature on the subject, and from 168 responses from a questionnaire study. The questions were objective and not theoretical.

4114. Wynkoop, John B. "System and efficiency in purchase of supplies." *Am Sch and Univ* 1929-30:25-6
Stresses the development of better buying and urges the making of bidding more simple.

Cross-index

4	87	1724	2465
27	532	1737	2659
39	621	1744	3905
50	1177	1780	4158
58	1184	2268	4214
68	1418	2276	*4219
81	1709	*2281	

FIRE PROTECTION

4115. *American City.* "To reduce fire hazards of buildings under construction." *Am City* 42:116-18 Je '30. il
Discusses fire hazards connected with construction, and methods of fire prevention and control.

4116. "Fire protection fundamentals for building codes." *Am City* 44:25 Ap '31
Quotation from a report of the Building Code Committee of the U. S. Department of Commerce. Sets out minimum requirements for fire resistance.

4117. *American School Board Journal.* "The element of safety in school buildings." (ed) *Am Sch Bd J* 79:67 Ag '29
Discussion of the need for safety considerations and of some of the menaces to safety in many school buildings.

4118. "Fire hazards of laboratory tables." *Am Sch Bd J* 79:126 O '29
Report of recent tests of the U. S. Bureau of Standards to determine the fire hazard connected with the use of wooden laboratory tables.

4119. Barton, J. R. "How to eliminate fire hazards." *Nation's Sch* 6:65-6 N '30
Suggestions are offered for meeting the need of protecting children against loss of life by fire.

4120. Bliss, Vincent R. "Recent measures that have lowered the cost of fire protection." *Nation's Sch* 6:73-5 Ag '30
Presents changes made by the National Fire Protection Association in the regulations governing the installation of automatic sprinklers and the results from same.

4121. Burke, T. A. "What would fire mean to your school?" *Sch Executives M* 51:256-7, 280 F '32
Discusses the dangers of fire due to poor construction and poor housekeeping.

4122. Escott, Ivan. "Fire protection for schools." *Am Sch Bd J* 80:68 Je '30
A discussion of fire hazards about school buildings with some suggestions for elimination of some hazards and protection against others.

4123. Hogston, Alfred. "Schoolhouse fires." *Indiana Teach* 72:12-13 Ja '28
Lists 12 features that go to make a school building safe from fires.

4124. Lovejoy, Philip. "Safeguarding pupils by reducing the fire hazard." *Nation's Sch* 6:76, 78, 80 Ag '30
Discusses fire hazards and the need for constant vigilance in protecting pupils' lives from these. Special application is made to the schools of Hamtramck, Michigan.

4125. Monahan, A. C. "Is the school laboratory a dangerous fire hazard?" *Nation's Sch* 4:72-3 D '29
Record of exhaustive tests conducted by the U. S. Bureau of Standards on the fire risk of ordinary school-building equipment.

4126. *Moulton, Robert S. "Fire protection for educational buildings." *Am Sch and Univ* 1928-29:55-60. plans, il
A discussion of building construction proper for the elimination of disastrous fires and of proper fire prevention and fighting equipment.

4127. "Building fire-safe schools." *Am Sch and Univ* 1932-33:42-5. il
Lists various methods of fire-proofing, treats of the enclosure of stairways, the subdivisioning of large areas, and the protection of existing buildings.

4128. National Board of Fire Underwriters. *Regulations of the Fire Underwriters governing first aid appliances.* Nat Bd of Fire Underwriters, New York
This booklet contains rules governing fire extinguishers, hand hose, and the use of sand fire pails and soda and sawdust.

4129. *Nation's Schools.* "Causes of school building fires." *Nation's Sch* 1:106 Ja '28
Summary of a report in the *Quarterly* of the National Fire Protection Association.

4130. "Fire hazards and the janitor." *Nation's Sch* 1:50 F '28
Sets the intelligence and faithfulness of the janitor as a limit of fire dangers. Mentions many fire hazards.

4131. "Report of school fires." *Nation's Sch* 1:60 F '28
Report of a study of fires in school buildings. Types of fires and types of buildings are compared.

4132. "Eliminating the fire hazard in schools." *Nation's Sch* 8:29 O '31
Gives the summary of the report given by Dr. Thomas D. Wood's committee on the school child at the White House Conference on Child Health and Protection.

4133. Nelson, Florence. "Safety education retards school accidents." *Nation's Sch* 2:17-22 Ag '28. il

A discussion of needs for and method of safety education. An efficient building from the safety point of view is urged. Causes of school fires are listed.

4134. Peterson, Russell S. "Cutting down the fire hazard." *Am Sch Bd J* 83:36, 94 O '31

Emphasizes the necessity for good housekeeping, safeguarding the heating plant, inspection of electric circuits, proper installation of fire extinguishers, and drills.

4135. Williams, Sidney J. "Making public schools safe from fire hazards." *Sch Executives M* 49:313-15, 340, 342 Mr '30

Discussion of various types of exits.

Cross-index

4	267	1069	2268
21	280	1184	2465
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68	624	1712	2784
69	672	1724	2790
70	675	1736	3065
71	690	1737	4104
87	703	1744	4158
89	880	1850	4231
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XIII. Interior Decoration

4136. *American School Board Journal.* "Mural decorations in Minnesota schools." *Am Sch Bd J* 77:48-51, 134 Ag '28. il

A discussion of the educational worth of mural decorations with some examples in different types of schools of Minnesota.

4137. "Mural decorations in the Ithaca High School." *Am Sch Bd J* 77:54-5 O '28

Mentions four illustrations of mural decorations in the Ithaca, New York, high school.

4138. "Color on school walls and ceilings." *Am Sch Bd J* 84:49 Mr '32

Description of the color scheme used in the Washington School, Wood River, Illinois.

4139. Birren, Faber. "What color shall we choose for the schoolroom?" *Nation's Sch* 1:53-6 Ja '28. il

A discussion of color and harmony. Retinal fatigue is discussed and types of wall finishes shown.

4140. "The proper use of color in the schoolroom." *Nation's Sch* 2:65-8 Ag '28. il

Presents some facts on ideal wall finishes and hues and discusses the use of color as a force in the creation of proper environment. A chart shows the influences of different colors.

4141. Davies, (Sir) Alfred T. *The cult of the beautiful in the school,* third ed. Oxford Univ Press, London, 1928. 36 p

An appeal for the beautiful in the school and its surroundings. Gives some suggestions as to how conditions may be made better.

4142. Gorsline, R. "Home room pictures." *H Sch Teach* 6:366-7 N '30

Discusses the need for properly decorated home rooms and offers some suggestions as to decorations.

4143. Heckel, G. B. "Modern trends in schoolhouse painting and decoration." *Am Sch and Univ* 1929-30:150-3. il

Traces tendencies and developments in painting schoolhouses, paying particular attention to color.

4144. Irvine, M. B. "Decoration of an auditorium." *Va J of Educ* 22:332-3 Ag '29

4145. Keebler, Katherine. "Decorating my sophomore room." *Chicago Sch J* 13:27 S '30

Tells how she transformed an ugly unused chemistry laboratory into a a livable classroom with the aid of a few yards of tarlatan, paint, and a piece of flowered oilcloth. The aid of the home economics and manual training departments can be enlisted for this worthwhile improvement in classrooms.

4146. Loring, Charles G. "Mural paintings and schoolhouses." *Am Sch Bd J* 83:57-60 S '31. il

Types of paintings found in various school buildings.

4147. *Nation's Schools.* "Choosing the right colors for the schoolroom." *Nation's Sch* 5:66 Je '30

Some suggestions for the decoration of schoolrooms, paying particular attention to the effect of color on size and space of the room.

4148. "'Lifting the ceiling' of the low room." *Nation's Sch* 6:80 Jl '30

Suggestions for making the low room seem high by proper decoration.

4149. *Office Appliances.* "Importance of interior decoration in offices." *Office Appliances* 54:30-1 Ag '31

Discusses the need for properly decorated and arranged offices and tells of some trends in office decoration.

4150. Whitney, W. "Spirit of the classroom." *Sch Sci and Math* 31:386 Ap '31

Discusses the effect of decorations and the general appearance of the room upon the work of the pupils.

4151. Winslow, Leon L. "Beautifying the schoolroom." *Nat Educ Assn J* 16:241-2 N '27

Discusses provisions for hanging pictures, treatment of walls, and bulletin boards.

Cross-index

21	87	1573	2274
24	621	1724	2399
32	675	1729	2465
33	818	1771	2467
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61	902	1781	3639
66	1112	1885	3640
68	1162	2207	4042
71	1190	2208	4158
76	1498	2267	4186
83	1499	2268	4203
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XIV. Standardization of School Buildings and Equipment

4152. *American Educational Digest.* "Standardizing buildings and equipment." *Am Educ Digest* 47:309 Mr '28

Gives the opinion of Dr. H. B. Millhoff, President of the Board of Education, Dayton, Ohio, on the standardization of buildings and equipment.

4153. *American School Board Journal.* "Standardization of school supplies and equipment." (ed) *Am Sch Bd J* 80:66 Ap '30

Summarizes the findings and conclusions of the National School Supply Association relative to the standardization of school supplies and equipment.

4154. "The care of school keys." *Am Sch Bd J* 81:44 N '30

Suggests that a device for key-control be in the principal's office in a wall cabinet. Recommends that there should be uniformity and standardization of locks of (1) outer and inner doors, (2) built-in cabinets and cupboards, (3) movable furniture, and (4) lockers.

4155. Berry, F. "Equipment and supplies." *Childh Educ* 5:285-6 F '29

A discussion of the evolution of school equipment requirements.

4156. Burt, C. F. "Standardization of metal doors and hardware accomplished without loss of freedom in architectural design." *Am Arch* 135:335-9 Mr 5 '29. plans, il

Sets forth advantages to be obtained by conformance to the recommendations for simplified practice issued by the Department of Commerce.

4157. *Elementary School Journal.* "Standardization of the color of school furniture." *El Sch J* 30:254-5 D '29

Summarizes the U. S. Department of Commerce report regarding the color of school furniture. Quoted from the *United States Daily.*

4158. *Engelhardt, N. L. *Standards for junior high school buildings.* Bur of Publ, Teach Col, Columbia Univ, New York City, 1932. 161 p

Considers in detail all the various standards for junior-high-school buildings under the following general topics: site, building, service systems, classrooms or recitation rooms, special classrooms, general service rooms, and administration rooms.

4159. Garrison, Charles. *Studies in the development of standardization and uniformity in the public schools of North Carolina from the Civil War to 1927.* Duke Univ, Durham, N. C., 1930

A study of the legal provisions for uniformity in the public schools of North Carolina, from the Civil War to 1927, which is largely concerned with the development of rural schools and that part of other systems controlled under state uniform laws. The general conclusion is that increasing state support has meant increased uniformity and state control in all of these particulars.

4160. Goldthorpe, J. H. *Evaluation of building standards as employed in the construction of composite school buildings.* Doctor's Thesis, Univ of Minnesota, Minneapolis, 1928

A study of the application of building standards to a single unit planned to house all enterprises of a community's educational program. The study endeavors to develop adequate and proper standards for this type of structure thru an analysis of judgments of superintendents, architects, and educational experts.

4161. Gompert, William H. "Schedule of standardized rooms in academic high schools, New York City." *Am Sch Bd J* 76:190 Ja '28
Gives standards, in tabular form, for academic high-school rooms in New York City high schools.

4162. Hopkinson, George M. "The progress of standard schools in Cleveland." *Am Sch Bd J* 78:56-8 F '29. il
A discussion of the building of schools according to the standard plans of the city of Cleveland. Savings in cost and other advantages are suggested.

4163. Hunter, H. Reid. "Atlanta uses novel plan to review standardized plans for elementary schools." *Am Sch Bd J* 76:38, 145 F '28
Review of recommendations of a committee from the National Association of Building Owners and Managers, which reviewed standardized plans for elementary schools for Atlanta.

4164. **National Council on Schoolhouse Construction.* "Proposed guide for planning elementary school buildings of conventional type of school organization." *Nat Council on Schoolhouse Construction* (Proc of 8th annual meeting) 1930:57-62; also printed as a separate pamphlet under title *Guide for the planning of elementary school buildings.* Milwaukee, Wis., 1932. 12 p
This is a report of the Committee on Standards of the National Council on Schoolhouse Construction. Standards are set up which cover almost every phase of building construction.

4165. Samuelson, Agnes. *Standardization of rural schools.* State of Iowa, Des Moines, 1928. plans, 47 p
Gives Iowa's school standardization law and the official rating card for Iowa standard schools. The author then gives detailed specifications for rating schools. Almost every phase of buildings, grounds, and equipment is dealt with in relation to the rural school.

4166. *School Executives Magazine.* "New type building." *Sch Executives M* 48:406 My '29
Description of the *O*-type building, the standardized type for New York City.

4167. State of Alabama. *8-A-1-B—Brick school building, fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, O 3 '27. 32 p
Floor plans and specifications.

4168. *Specifications for vocational buildings in brick.* State Dept of Educ, Div of Rural Sch, Montgomery, O 28, '27. 18 p
Specifications only.

4169. *4-A-1-F frame school building fronting north or south.* State Dept of Educ, Div of Rural Sch, Montgomery, Mr 19 '28. il, 24 p
Floor plans and specifications.

4170. *6-A-1-F frame school building to face east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, Mr 19 '28. 24 p
Floor plans and specifications.

4171. *12-A-1-B brick school building fronting north or south.* State Dept of Educ, Div of Rural Sch, Montgomery, O 22 '28. 36 p
Floor plans and specifications.

4172. *6-1-F frame school building fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, N 16 '28. 20 p
Floor plans and specifications.

4173. *Plans and specifications for approved toilets for new buildings for Alabama public schools.* State Dept of Educ and State Bd of Health, Montgomery, 1928. plans, il, 16 p
Plans and specifications.

4174. *6-A-1-B:H-S brick school building fronting north or south.* State Dept of Educ, Div of Rural Sch, Montgomery, Ja 1 '29. il, 36 p
Floor plans and specifications.

4175. *6-A-1-B: Elementary school building to face east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, Ap 8 '29. il, 39 p
Floor plans and specifications.

4176. *6-A-1-B: Standard high school building to face east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, Ap 25 '29. il, 40 p
Floor plans and specifications.

4177. *Specifications for the repairs and additions to old building.* State Dept of Educ, Div of Sch House Planning, Montgomery, Ja 1 '30. 8 p
Specifications only.

4178. *Specifications for the 6-1-B brick school building facing east or west.* State Dept of Educ, Div of Rural Sch, Montgomery, 1930. 7 p
Specifications only.

4179. *Program of studies and standards for organization of junior high schools.* State Dept of Educ, Div of Sec Educ, bul no. 5, Montgomery, 1932. 80 p
One section gives the requirements and recommendations for standard Alabama junior-high-school buildings.

4180. *Standards for the classification of elementary schools, 1931-32.* State Dept of Educ, bul no. 2, Montgomery, 1932. 48 p
Lists the minimum requirements for each grade of school and presents the score card used in evaluating schools.

4181. *8-1-B—Brick school building fronting north or south.* State Dept of Educ, Div of Rural Sch, Montgomery. 22 p
Floor plans and specifications.

4182. *14-A-1-B—Brick school building, fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery. 32 p
Floor plans and specifications.

4183. *10-1-B—Brick school building, fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery. 31 p
Floor plans and specifications.

4184. *8-1-F frame school building fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery. 14 p
Floor plans and specifications.

4185. *8-1-F frame school building fronting east or west.* State Dept of Educ, Div of Rural Sch, Montgomery. 14 p
Floor plans and specifications.

4186. State of Indiana. *Administrative handbook for Indiana high schools.* State Dept of Pub Instr, bul no. 100, Indianapolis, 1929. 104 p
Contains state requirements of Indiana for the certification of high schools.

4187. State of Kansas. "Rural and grade school department." In *Twenty-Sixth Biennial Report of the State Superintendent of Public Instruction of Kansas*, p. 9-19. Topeka, 1927-1928
Discusses grounds, building plans, lighting, equipment, and toilets and gives the score card by which rural schools of Kansas are rated.

4188. State of Oklahoma. [*Plans*] *for better schoolhouses.* State Dept of Pub Instr, Div of Schoolhouse Planning, Oklahoma City, 1929. plans, il, 122 p

4189. Unrich, Flora. *The standardization of school equipment.* Master's Thesis, Univ of Cincinnati, 1930; abstract in *Graduate theses in education, Teachers College, University of Cincinnati, 1927-31,* by Carter V. Good; Walter L. Collins; and Chester A. Gregory, eds., vol 1, p. 376, Univ of Cincinnati, 1931

The author in this thesis sets out the extent of standardization in certain cities and develops standard lists of equipment. Also makes a comparative study of lists obtained.

4190. Whiteneck, H. A. *Syllabus of building standards, elementary schools.* City Sch, Dept of Res, Long Beach, Calif., My '29. plates, mim, 18 p

Gives tables and charts for both the traditional and the platoon types of school as well as statements for architects.

4191. Works, George A. "Standardization of rural schools." In *The classroom teacher,* vol 1, p. 517-44. The Classroom Teacher, Inc., Chicago, 1927

The meaning and methods of standardization of the rural school are given, followed by a discussion of the important items in a standard school, including site, building, lighting, heating and ventilation, equipment, the teacher, organization, hygiene of the school plant, and community attitude.

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32	626	1548	2687
49	777	1555	2993
62	782	1556	3038
69	785	1562	3043
70	875	1570	3050
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86	1068	1775	3639
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206	1075	2198	4597
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XV. Remodeled Buildings and Additions

4192. *American School Board Journal.* "Salvaging a burned schoolhouse." *Am Sch Bd J* 78:53-4 Ap '29. plans, il

Story of the rebuilding of a grade building partly destroyed by fire. Parts of the old building were incorporated in the new structure.

4193. Dennis, C. G. "Making the best of the old schoolroom." *Am Childh* 16:21-3 Ap '31

Suggestions for making old rooms and buildings more attractive.

4194. *Journal of Education.* "School buildings." *J Educ* (London) 63:642 S '31

A statement relative to repair and replacement of buildings.

4195. Merrill, A. W. "Problems of planning additions to schoolhouses." *Am Sch and Univ* 1929-30:146-9. plans

Discusses the recent building program of Des Moines and suggests solutions for a number of problems.

4196. Roberts, H. C. "Making new school buildings out of old." *Am Sch Bd J* 84:55-6, 110 Ja '32. il

Description of the rehabilitation of the Everett and Cooper grade school buildings in Sioux City, Iowa.

4197. Sheffer, W. E. "Remodeling and expansion of a grade building." *Am Sch Bd J* 80:81, 156, 158 Ja '30. plans, il

Description of remodeling of the Bluemont Grade School building, Manhattan, Kansas.

4198. Smith, Howard Dwight. "Rehabilitation of obsolete buildings." *Sch Executives M* 48:515-16 Jl '29

Discusses a number of phases of the rehabilitation problem. Some educational advantages are set out.

4199. "Rehabilitating obsolete public school buildings." *Nat Assn Pub Sch Bus Officials* (Proc of 18th annual meeting) 1929:30-40

Discussion of some of the problems of rehabilitation. Among these are the problems of population, political pressure, changing building codes, school finance, lighting possibilities, fire hazards, and sanitary possibilties.

4200. State of Wisconsin. "Schools—alteration, repair, erection, equipment, etc." In *Public health laws and regulations adopted during 1927*, by William Fowler, comp. *Pub Health Report* (Supplement) 75:792-4, 1930

Gives some of the school laws of Wisconsin applying to the schools.

4201. Wetzel, B. C. "Architectural problems met in a reconstruction project." *Nation's Sch* 4:51-4 N '29. plans

The architect includes the floor plans of the old Holbrook School at Hamtramck, Michigan, with the plans for the building as remodeled after exhaustive study.

4202. Whytock, Norman Robert. *A study of the Glendale Avenue School.* Master's Thesis, Univ of Southern California, Los Angeles, 1925. 140 p.; abstract in *Annotated index of theses and dissertations in education*, Sch of Educ, Univ of Southern California, Los Angeles, 1930. p. 87

A study of this building with a view to converting it into a junior-high-school building.

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68	532	2267	2543
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XVI. The Maintenance of Buildings and Equipment

4203. *American School and University.* "School painting practices in 174 cities." *Am Sch and Univ* 1930-31:173-5
Report of a study of painting in some cities of over 25,000 population.

4204. *American School Board Journal.* "Repairs and upkeep of schoolhouses." *Am Sch Bd J* 75:112 O '27
Review of a book by Harwood Muzzy Schwartz entitled *Improvements in the maintenance of public school buildings* (No. 1788).

4205. "The cost of physical maintenance of the school plant in New York City." *Am Sch Bd J* 77:50 N '28
A summary of the financial and statistical report of the Board of Education of New York City for the year 1927.

4206. "School-building maintenance." *Am Sch Bd J* 81:52, 140 Jl '30
Presents in some detail the plan for maintenance of buildings and equipment in the schools of Highland Park, Michigan. Some comparisons of cost are made.

4207. "Schoolhouse repairs and maintenance." *Am Sch Bd J* 83:72 N '31
Results of an investigation made by the Buffalo, New York, Board of Education in an attempt to eliminate waste.

4208. "Janitorial man-power in a high school building." *Am Sch Bd J* 83:56 D '31
Application of the Minneapolis plan of analysis of school janitorial service to a specific building to determine the man-power required.

4209. Ames, Helen B. "Outdoor equipment needs paint protection." *Playground and Recreation* 23:408-9 S '29
Discusses the wear on playground equipment and the need for protecting it with paint. Part of the article is given to a discussion of paints and how to apply them.

4210. Brunstetter, M. R. *Business management in school systems of different sizes.* Columbia Univ, Teach Col, Contr to Educ no. 455, New York City, 1931. bibliog, 135 p
Report of a study of accounting which includes that for construction, repair, protection, and management.

4211. Gosling, Thomas W. "The school plant: the cost of maintenance." *Am Sch Bd J* 80:68, 132 My '30
Account of a study made of the percentage of distribution of the various items of maintenance of the school plant for 27 cities over 100,000 population for the school year 1925 to 1926.

4212. Graham, John W. "The making of repairs in the school plants of Dayton." *Ohio State Educ Conf* (Proc of 7th annual session) 1927:458-9
Brief statement of the organization in the Dayton, Ohio, schools for the making of repairs.

4213. Hallett, Edwin S. "A better budget for summer repairs of schoolhouses." *Am Sch Bd J* 76:56, 141 Je '28
Presentation of the Milligan plan as used in St. Louis. Making the budget is described in detail.

4214. Lee, John J. "Janitor service and care of school buildings." *H Sch Q* 17:42-5 O '28
A classified list of the duties of a janitor.

4215. Lovejoy, Philip. "Securing efficient janitorial service." *Nation's Sch* 3:17-21 Ja '28. il

Story of the plan used by the Hamtramck, Michigan, Board of Education in choosing janitors.

4216. "Why superintendents should plan their buying now." *Nation's Sch* 5:88, 90, 92, 94 Ap '30

A general discussion of the value of early buying of supplies, books, and equipment. The problem of proper maintenance of buildings is discussed.

4217. Miskella, William J. "The spray painting of school buildings." *Am Sch Bd J* 80:62 Je '30

Excerpts from letters of men directly connected with schools relative to the use of spray-painting machines in schools.

4218. *Nation's Schools.* "Summer, not spring, is the time for school house cleaning." *Nation's Sch* 6:57 Ag '30

A discussion of cleaning work to be done during the summer vacation.

4219. *Reeves, Charles E. and Ganders, Harry Stanley. *School building management.* Columbia Univ, Teach Col, Bur of Publ, New York City, 1928. 395 p

Presents the present practices and best methods of handling such school building problems as cleaning, heating, ventilating, care of grounds, plumbing, and lighting. Floors, toilets, and blackboards share in the author's attention; also such problems as the relation of health and discipline to properly cared for buildings and equipment.

4220. *Schwartz, H. M. "A scientific approach to maintenance." *Am Sch and Univ* 1928-29:144-8

Report of a study of individual items of repairs to school buildings and the importance of these items. The program of repairs and the repair budget are discussed and some standards for measuring the adequacy of the maintenance program are determined.

4221. Tilt, Russell E. "A study in maintenance costs of school building—contract method *vs.* regularly employed staff." *Nat Assn Pub Sch Bus Officials* (Proc of 18th annual meeting) 1929:24-9

Considers the problems of janitor service and suggests ways for cutting down maintenance costs. The contract system is criticized. Suggestions of savings by the use of versatile staffs of janitors are given.

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21	1177	2240	2704
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4242. Ordway, G. G. "The insurance of school buildings." *Am Sch Bd J* 82:89, 92 My '31

A criticism of "self-insurance" of school property.

4243. Platts, P. K. "Does state insurance on school property pay?" *Am Sch Bd J* 83:59 Jl '31

Examples are given to show that state insurance of school buildings is profitable.

4244. *Roberts, H. C., chairman. "Fire and other insurance for public school property." *Nat Assn of Pub Sch Business Officials* (Proc of 19th annual meeting) 1930:35-74. bibliog

A report of an investigation carried on by the research committee showing practices in the protection from hazards used by school districts thruout the country, and experiences which record actual results from practices now obtaining.

4245. Smith, Harvey A. "Self-insurance for public school buildings." *Am Sch and Univ* 1929-30:162-5. Il

Discusses the responsibility of school boards for property and life losses. Presents the case of self-insurance.

4246. **Economy in public school fire insurance.* Columbia Univ, Teach Col, Contr to Educ no. 428, New York City, 1930. 111 p.; reviewed in *Educ Res Bul* 10:443-4 N 11 '31

Points out methods of reducing premium costs by removing such fire hazards as may exist in school buildings, discusses methods of economy thru proper insurance procedure, and treats of self and state insurance plans. Chapter V gives a list of causes of waste in insurance procedure.

4247. Swander, O. J. "Insuring city property against fire." *Am City* 41:115-17 Jl '29

Comparison of commercial and self insurance. Discussion of some of the clauses in insurance policies.

4248. Taylor, J. W. *Insuring public school property in Mississippi.* Master's Thesis, George Peabody Col for Teach, Nashville, Tenn, 1930. 91 p

A study to determine what practices and proceedings are followed in insuring public property in Mississippi.

4249. Thomas, John J. "Fundamentals of insurance for school properties." *Am Sch and Univ* 1930-31:176-7

Discusses the need for insurance and suggests the basis upon which to insure.

4250. Woodward, Harry R. "Should depreciation be accounted for in public school buildings." *Sch and Soc* 34:870-3 D 26 '31

Points out the necessity for consideration of depreciation and discusses methods used.

Cross-index

531	*2276	2646	2664
1767	2281	2651	2717
1774	2479	2652	4120
1778	2606	2659	4124
2274			

XVIII. The Teacher's Home

4251. *American School Board Journal.* "The Edinburg Teacherage at Edinburg, Texas." *Am Sch Bd J* 79:52-3 O '29. plans, il

Describes this teacherage in detail and tells how it was financed. Tells also of living costs and conditions therein.

4252. Herring, William C. *The rural teacherage; with special reference to Oklahoma.* Doctor's Thesis, Cornell Univ, Ithaca, N. Y., 1931. 202 p

Development of a set of standards to be used by school officials in planning new teacherages or in scoring those already erected, with special reference to those in Oklahoma. Data were secured by questionnaires from 320 teacherages.

Cross-index

2	17	82	2197
9	21	1872	2208
15	38	1873	4460

XIX. Open-Air Schools

4253. *American School Board Journal.* "The Campbell Open-Window School for delicate children." *Am Sch Bd J* 79:55, 124 D '29. il

A discussion of the work of the Campbell Open-Window School at La Salle, Illinois.

4254. *Journal of the American Medical Association.* "Drawbacks of open-air schools." *Am Medical Assn J* 94:1249 Ap 19 '30

Review of a study of open-air schools in London. The open-air school is rather severely criticized.

4255. Lewis, Samuel R. "The open air school, Columbus, Ohio." *Nat Assn Pub Sch Bus Officials* (Proc of 18th annual meeting) 1929:133-4

Description of the open-air school and discussion of its heating.

4256. Rogers, James Frederick. "Schools and classes for delicate children." *U. S. Bur Educ Bul*, no. 22, p. 11-14, 1930. plans, il

Discusses materials, costs, floors, windows, heating, and sleeping accommodations of open-air schools and rooms. Many illustrative floor plans are given.

4257. Rowell, Hugh Grant. "Open-air classes and schools." *Am Sch and Univ* 1929-30:290-4. plans, il

Discusses types of fresh-air schools, presents general principles, and describes buildings fitted for these needs.

4258. Schlundt, Meta S. "Service of the open window room." *Sch Executives M* 49:219-22 Ja '30

Description of room facilities and equipment in Evansville schools.

4259. *Spectator.* "Open-air schools." *Spec* 139:646-7 O 22 '27

Discusses the value of the open-air school and describes a number of such schools.

Cross-index

32	1340	1842	3569
39	1363	*2277	3590
87	1445	2447	3809
376	1841	3562	4270
1253			

XX. The Portable Schoolhouse

4260. *School and Society.* "Use of portable school buildings in Baltimore." *Sch and Soc* 33:127-8 Ja 24 '31

Tells of the use of portables in Baltimore and of the need for these.

Cross-index

1340	*2281	2443	3954
1367			

XXI. Schoolhouses of Other Countries

4261. Alt, Harold L. "What a heating engineer finds in Russia." *Domestic Eng* 133:79-80, 83, 85 O 4 '30. plans, il

Describes Russian school buildings which are unusual and present some difficult engineering problems.

4262. *American Architect.* "Design awarded first prize, junior high school competition, St. Pölten, Austria." *Am Arch* 134:113-14 Jl 20 '28. plans, il

Gives picture and floor plan of this Austrian building.

4263. "Design awarded first prize, public school competition, Lilienfeld, Austria." *Am Arch* 134:335 S 5 '28. plans, il

Gives picture of a school building on the curved plan.

4264. "A German public school at Celle." *Am Arch* 138:24-7 Ag '30. plans, il

Pictures and description of this building and some of its parts. Lack of ornamentation is evident.

4265. *American School and University.* "Photographs of some of the means used to make science a vital subject in German elementary schools." *Am Sch and Univ* 1932-33:328-30

Photographs of several German elementary school science rooms.

4266. *American School Board Journal.* "A London County Council Secondary School for Boys." *Am Sch Bd J* 77:55-6 N '28. plans, il

A description of an English school building for boys doing the equivalent of our high-school work.

4267. "Westwood Grammar School at Northleach, England." *Am Sch Bd J* 78:52, 152 Ap '29. plans, il

Description of a group of grammar grade buildings in a community seven miles from a railway station in England.

4268. "Modernism in European school architecture." *Am Sch Bd J* 79:63 Jl '29. il

Very brief discussion of the modernistic tendencies in school building in Europe.

4269. *Architectural Record.* "Economy in planning." *Arch Rec* 66:274-83 S '29. plans, il

Tells of economies in the construction of the high school building at Celle, Germany, and shows pictures of the building.

4270. "An open-air school in Holland." *Arch Rec* 69:58 Ja '31. il

Brief description of a school building three sides of which are windows which may be opened or closed as the weather demands. The school is in Amsterdam.

4271. *Architectural Review.* "New Whitgift Grammar School, South Croydon, London." *Arch R* 70:41-2 Ag '31. plans, il

A brief description of an English school building.

4272. *Architecture.* "Girls' School, Hamburg; views." *Arch* 60:274-6 N '29

4273. Choy, Yoon Ho. *Reorganization of private education in Korea with special emphasis upon the rural secondary phase,"* p. 95-6. Doctor's Thesis, Indiana Univ, Bloomington, 1930

The author discusses buildings, grounds, and equipment needs on the basis of American standards.

4274. Coffin, H. Errol. "Modern schools in South America." *Am Sch and Univ* 1930-31:66-8. il

Description of some new school buildings in Peru and Chile, South America.

4275. Craig, G. S. "Science in Russian elementary schools." *Sci Educ* 16:3-5 O '31

Tells of the Russian Combine School and its provisions as to location and arrangement for teaching.

4276. Dunlop, John Y. "The Otley Grammar School building." *Am Sch Bd J* 76:65, 133 Mr '28. plans, il

A study of differences in English buildings built before and since the war. A very brief description of the Otley Grammar School is given.

4277. "The Wandsworth Technical Institute, London." *Am Sch Bd J* 79:61-2 Ag '29. plans, il

Description of a building representing the solution of a series of problems involved in fitting a schoolhouse to a definite educational program.

4278. Great Britain Board of Education. *School playing fields.* Educ pamphlet no. 80, His Majesty's Stationery Office, London, 1930. 86 p

Discusses among other things layout and equipment and selection and maintenance of sites.

4279. *Suggestions for the planning of new buildings for secondary schools.* Educ pamphlet no. 86, His Majesty's Stationery Office, London, 1931. 94 p.; reviewed in *J Educ* (London) 63:730 O '31

Chapters are devoted to sites, general planning, size of school, and such problems.

4280. Heath, R. F. and Patterson, J. S. "School ventilation studies in Toronto." *Am Soc Heat V E J* 33:715-25 D '27

Report of studies on temperature, humidity, and velocity of air at inlets and outlets in the Alexander Muir School in Toronto.

4281. Hegemann, Werner. "Recent tendencies in school architecture in Germany." *Am Sch and Univ* 1930-31:41-5. plans, il

Discussion of German school architecture since the World War. Descriptions of a number of schools are given.

4282. Hoskins, Charlotta. "School libraries in Hawaii." *Library J* 54:112-15 F 1 '29. il

A description of the Maui Library and its beautiful location. The organization of the library is also given.

4283. Milne, A. H. "How Montreal erects elementary school buildings." *Am Sch Bd J* 78:55 Ja '29

The standard building supplied by the Protestant Board of School Commissioners is set out in detail.

4284. *School and Society.* "A new school in Germany." *Sch and Soc* 34:617-18 N 7 '31

Description of an 800-capacity, $250,000, primary school, Am Klosterhof in Luebeck.

4285. Scottish Education Department. *Recommendations to be followed in the planning and fitting up of schools.* His Majesty's Stationery Office, London, 1931. 25 p

Gives the standards recommended by the Scottish Education Department on such as the following: sites, playgrounds, halls, classrooms, baths, entrances, stairs, lighting, heating, water supply, desks, and miscellaneous special rooms and provisions. A revision of a 1925 edition of the same title.

4286. Shaud, P. Morton. "Cuxhaven High School, Germany." *Arch R* 70:plate XI Ag '31

A brief description of a German high school.

4287. Willmott, John N. "A successful trade and technical school." *Ind Educ M* 31:388-91 Ap '30

A description of a school at High Wycombe, England. This school is designed to fit the community industrial need.

4288. Woodbridge, Frederick J. "Ideas from European schools." *Arch Forum* 55: 725-30 D '31. plans, il

Discusses European schools from the standpoint of materials, orientation, plans, construction, and elimination of non-essentials. Describes the features in a few outstanding buildings.

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94	2309	3569	4050
119	2990	3833	4051
683	3560	3862	4052
2271			

XXII. Plans, Illustrations, and Descriptions of Existing, Proposed, and Model School Buildings, Classified by States

FOUR-YEAR AND SENIOR-HIGH-SCHOOL BUILDINGS

Alabama

4289. *Architectural Forum.* "Nine senior high school buildings." *Arch Forum* 55: 649-80 D '31. plans, il

Gives pictures and brief descriptions of school buildings in Great Neck, New York; Normal, Illinois; San Diego, California; San Juan Capistrano, California; Danvers, Massachusetts; Fairport, New York; Wisconsin Rapids, Wisconsin; Los Angeles, California; Mobile, Alabama; and Bronxville, New York.

4290. Harrison, W. R. "Montgomery's high school plant." *J Educ* 113:182, 186 F 16 '31. il

A description and story of the erection of the Sidney Lanier High School, Montgomery, Alabama.

Arizona

4291. Kincaid, Horace. "A modern rural high school in Arizona." *Am Sch Bd J* 80:59-60 Je '30. plans, il

Sets out in some detail the 250-capacity Union High School building at Tolleson, Arizona, erected at a cost of $62,312, or 14.5¢ per cu. ft.

Arkansas

4292. *American School Board Journal.* "The Little Rock High School, Little Rock, Arkansas." *Am Sch Bd J* 77:52-6 Ag '28. plans, il

A detailed description of a $1,600,000 school.

4293. Hamilton, C. R. "A high school and junior college for negroes." *Am Sch and Univ* 1931-32:76-9. il

A description of the building and equipment of the Paul Lawrence Dunbar High School, Little Rock, Arkansas.

4294. Mann; Wanger; and King. "The North Little Rock High School." *Am Sch and Univ* 1929-30:73-4. plans, il

Brief description of a $450,000 high-school building. The building has a capacity of 2,000, and cost 22¢ per cu. ft.

4295. *School Executives Magazine.* "The Fort Smith High School building." *Sch Executives M* 48:546-8 Ag '29. plans, il

A description of a high-school building, together with the story of the research and planning leading up to it.

California

4296. *American Architect.* "Beverly Hills High School." *Am Arch* 135:115-20 Ja 20 '29. plans, il

Pictures and floor plans of this building.

4297. Bissell, Howard G. "Planning and building a union district high school." *Nation's Sch* 2:19-24 S '28. plans, il

Story of the manner in which Calaveras, California, solved the problem of needed school facilities. Gives the description of a building which provides for almost an entire county.

4298. Hawkins, J. H. "A high school for few." *Am Sch Bd J* 81:54, 126, 128 N '30. plans, il

Description of a one-story small high school for an enrollment of less than 50 at San Juan Capistrano, California.

4299. Irwin, Eugene Jerel. "An interesting California high school." *Am Sch Bd J* 77:50-2, 136 S '28. plans, il

A description of a building and its equipment located at Santa Barbara, California.

4300. Marston, Mott M. "Simplicity and flexibility are combined at Tustin." *Nation's Sch* 3:57-61 F '29. plans, il

Description of a high-school building of modified Spanish architecture. Provisions for expansion are shown.

4301. *School Executives Magazine.* "Schools of El Segundo." *Sch Executives M* 49:106 O '29. il

Brief description of a California high school.

4302. *Western Journal of Education.* "Compton Union High School and Junior College." *Western J Educ* 35:12 Jl '29. il

Illustration and description of buildings and growth of this new California junior college.

4303. Wyckoff, Ralph. "A model California high school." *Sierra Educ News* 23: 461-4 O '27. plans, il

A brief description of the Salinas Union High School, Salinas, California. At the time it was completed it was considered the most complete high-school unit under one roof in California.

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Connecticut

4304. *American Educational Digest.* "The Bulkeley High School." *Am Educ Digest* 47:61-4 O '27. plans, il

A description of a $1,800,000 school located in Hartford, Connecticut.

4305. *American School Board Journal.* "The Stamford High School, Stamford, Connecticut." *Am Sch Bd J* 78:57-60 My '29. plans, il

Describes a senior high school with 85 classrooms and 2,500 capacity, built at a total cost of $1,288,889, 37.75¢ per cu. ft., and $51.55 per pupil.

4306. "The Fitch High School, Groton, Connecticut." *Am Sch Bd J* 80:63-4, 124 Mr '30. plans, il

A brief description of a school, which cost $209,884, or 32¢ per cu. ft.

4307. Mills, Lewis S. "The Plainville High School, Plainville, Connecticut." *Am Sch Bd J* 78:62-4 My '29. plans, il

This $200,000 high-school building combines many admirable features by the use of the half *I* type.

4308. Ritchie, John. "Flexibility, the modern trend in school planning." *Nation's Sch* 1:19-26 F '28. plans, il

Presents unit construction as an innovation to accommodate changing programs and serve educational and community needs. A description of the Morgan Gardner Bulkeley High School, Hartford, Connecticut.

Florida

4309. Adams, Franklin O. "Three basic considerations which determined the design of a Tampa high school." *Am Sch and Univ* 1928-29:90-1. plans, il

Discusses briefly the building program of Tampa and the Henry B. Plant High School building.

4310. *American Architect.* "Daytona Beach High School, Daytona Beach, Florida." *Am Arch* 134:414-16 S 20 '28. plans, il
Pictures and floor plans of this building are given.

4311. Hamon, Ray L. "The Miami Senior High School." *Am Sch and Univ* 1928-29:97-101. plans, il; also *Am Sch Bd J* 77:57-60, 117, 120 O '28
Story of the planning and designing of a $1,120,000 building and a good description of the structure. A number of special features are described. Principal types of equipment installed are listed.

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Georgia

4312. Daniel, Roland B. "The Columbus, Georgia, high school." *Am Sch Bd J* 76:54-6 O '27. plans, il
Description of a $425,000 building in the residential district of Columbus, Georgia.

4313. Sayward, William J. "The girls senior high school, Atlanta, Georgia." *Am Sch and Univ* 1928-29:92-4. plans, il
Description of one unit of three proposed, and of the adjustments necessary because only one unit is to be built now. The elevation of the land became a problem in this case.

Illinois

4314. *American School Board Journal.* "The Community High School, Earlville, Illinois." *Am Sch Bd J* 77:53-4 S '28. plans, il
Story of a rural community problem cared for by the building which is described in the article.

4315. "An Illinois community high school." *Am Sch Bd J* 77:63-4 O '28. plans, il
Discussion of the building of a community high school and the way in which it fits the community. The building is described in detail.

4316. "The Thornton Fractional Township High School." *Am Sch Bd J* 77:51, 110, 112 D '28. plans, il
Description of a building serving a part of a township. Equipment is shown.

4317. "The Blue Mound School at Blue Mound, Illinois." *Am Sch Bd J* 79:64 Jl '29. plans, il
Describes the school and briefly tells the story of its financing and construction.

4318. "The Mattoon Senior High School." *Am Sch Bd J* 81:49-51 N '30. plans, il
Describes a $318,914 senior-high-school building, having a pupil capacity of 750. This building is in three units: (1) an academic or classroom unit, (2) a physical education and shop unit, and (3) a unit including an auditorium and additional classrooms.

4319. Gerhardt, Paul. "The new Lane Technical High School." *Ind Educ M* 31:386-7 Ap '30. il
Describes the buildings and site of a Chicago high school and lists its facilities.

4320. Haggard, W. W. "Joliet Township High School and Junior College addition." *Am Sch Bd J* 83:56, 111 Ag '31. il
Description of the fifth unit of a three-story building of Tudor Gothic architecture. This unit contains 1,093,262 cu. ft., and cost $430,000 or 39.3¢ per cu. ft.

4321. Llewellyn, Joseph C. "Building schools with a view to the future." *Nation's Sch* 1:27-32 Ja '28. plans, il

Discussion of the need of careful planning and broad vision with a view to future needs in school buildings. York community and Lyons township high schools are described to illustrate.

4322. Payne, Edgar A. "The Community High School, Durand, Illinois." *Am Sch Bd J* 79:64 Ag '29. plans, il

Brief description of a $76,000 community high school.

4323. Schlacks, Henry J. "This new Catholic high school is a credit to Chicago." *Nation's Sch* 3:47-53 Mr '29. plans, il

Description of the Holy Family High School for Girls, Chicago.

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Indiana

4324. *American School Board Journal.* "The New Paris high school." *Am Sch Bd J* 77:55, 118 D '28. plans, il

Description of the building and equipment of the New Paris, Indiana, high school, which has a capacity of 220.

4325. "The high school building at New Albany, Indiana." *Am Sch Bd J* 78: 63-4, 150 F '29. plans, il

Detailed description of a building designed to meet the needs of a community center and high school. The building has a capacity of 900, and was erected at a cost of $360,000, or 16.5¢ per cu. ft.

4326. "The Tell City High School, Tell City, Indiana." *Am Sch Bd J* 81:49-50 D '30. plans, il

Describes a high school building having an auditorium with combined stage and gymnasium and a capacity of 1,300.

Iowa

4327. Shirley, William F. "Successful use proves school building value." *Am Sch Bd J* 84:52-4, 90 Ja '32. plans, il

Description of the Marshalltown, Iowa, senior-high-school and junior-college building, constructed at a cost of $442 per pupil, with a capacity of 800 and an auditorium seating 1,200.

Kansas

4328. *American School Board Journal.* "The rural high school at Norcatur, Kansas." *Am Sch Bd J* 77:53-4, 121 D '28. plans, il

Story of the campaign for a $70,000 building and a description of the building.

Kentucky

4329. *American Architect.* "Lexington High School, Lexington, Kentucky." *Am Arch* 133:271-2 F 20 '28. plans, il

Gives picture and plans.

Louisiana

4330. *American Architect.* "C. E. Byrd High School, Shreveport, Louisiana." *Am Arch* 132:815-18 D 20 '27. plans, il

Gives pictures and plans.

4331. *American School Board Journal.* "Some recent school buildings erected in Louisiana." *Am Sch Bd J* 75:49-50 N '27. plans, il

A brief description of some of the schools of Shreveport and Baton Rouge, Louisiana.

Maryland

4332. *American School Board Journal.* "The Western High School of Baltimore." *Am Sch Bd J* 78:61-2, 138 Je '29. plans, il

A description of a building, accommodating 2,000, which was erected at a cost of $1,250,000, or 33.6¢ per cu. ft.

Massachusetts

4333. *American Architect.* "Lexington High School, Lexington, Massachusetts." *Am Arch* 134:697-9 N 20 '28. plans, il

Gives pictures and floor plans of an *L*-shaped building.

4334. *American School Board Journal.* "The new high school, Westfield, Massachusetts." *Am Sch Bd J* 82:72-4 Ja '31. plans, il

Describes a three-story school building, without basement, having a capacity of 1,000 pupils. This building was completed in 1930 at a cost of $535,461.

4335. Cooper, Frank Irving. "The Somerville High School group." *Sch Executives M* 49:16-19, 37 S '29. plans, il

General description of the outstanding features of a 3,000-pupil-capacity Massachusetts high-school building.

4336. *Modern Public Buildings.* "Senior high school, Chelsea, Massachusetts." *Modern Pub Bldgs* 2:23 F '28. plans, il

Brief description of a 1,500-capacity building erected at a cost of $925,000.

4337. Ritchie, John. "Creating a modern high school in an old building." *Nation's Sch* 2:27-32 Ag '28. plans, il

Story of the development of a civic unit in Somerville, Massachusetts. The high-school building is described.

4338. Stiles, Chester D. and Harding, M. B. "Westfield waits seven years for its new high school." *Nation's Sch* 8:37-42 S '31. plans, il

Plans and description of a $535,000 senior-high-school building at Westfield, Massachusetts.

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Michigan

4339. *American Educational Digest.* "Thomas M. Cooley High School." *Am Educ Digest* 47:165-6 D '27. il

Description of a Detroit building and information about its outstanding features.

4340. "The Manistee High School building." *Am Educ Digest* 48:68-9, 90 O '28. plans, il

A description of the $290,000 high-school building in Manistee, Michigan. The building has a capacity of 800, and cost 25.2¢ per cu. ft.

4341. *American School Board Journal.* "The senior high school and junior college at Muskegon, Michigan." *Am Sch Bd J* 75:51-3, 128, 133 O '27. plans, il

Description of a $700,000 unit of a central educational group at Muskegon.

4342. "The Fordson School." *Am Sch Bd J* 76:57-62, 144 Je '28. plans, il
A detailed description of the high school at Fordson, Michigan, which was erected at a cost of $1,946,043, or 48.9¢ per cu. ft.

4343. Childs, Frank. "Incorporating unusual features in a modern school." *Nation's Sch* 1:23-30 Je '28. plans, il
Shows how pupils of the Jackson, Michigan, high school are stimulated by surroundings that lend atmosphere to the subjects they study.

4344. Holmes, Warren S. "The Hillsdale High School: a community school." *Am Sch Bd J* 82:52-4, 123-4 Mr '31. plans, il
A story of the planning and a description of the building.

4345. Willman, E. J. and Ittner, William B. "The Owosso schools plan for the future." *Am Sch Bd J* 81:49-51 O '30. plans, il
Description of Owosso, Michigan, senior high school erected in 1929 at a cost of $500,000. The school is built in three unit sections: "one houses the joint school and community activities; one long wing is for strictly academic work"; and the rear section segregates the physical training and manual arts.

4346. Worden, Lloyd W. "A school that is planned to serve as a community center." *Nation's Sch* 2:39-44 D '28. plans, il
Description of the Royal Oak, Michigan, senior-high-school building. This building ranks high according to the standard set by a committee of the N.E.A.

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Mississippi

4347. *American School Board Journal.* "A southern community school group." *Am Sch Bd J* 83:55-6, 124 Jl '31. plans, il
Description of the Bobo High School of Clarksdale, Mississippi, erected at a cost of $190,000, or 22¢ per cu. ft.

Missouri

4348. *American School Board Journal.* "A building planned for enlargement, the Excelsior Springs, Missouri, high school." *Am Sch Bd J* 81:57-8, 137 S '30. plans, il
A presentation of items considered in the construction of a new building in a community where increase in enrollment and expansion of program are both evident. The contract price of the building was $139,973, or 22¢ per cu. ft.

4349. Hutchings, Emily Grant. "William B. Ittner's suburban schools around St. Louis." *Am Sch Bd J* 76:48-51 Ja '28. il
Principles of school architecture embodied in a group of schools about St. Louis.

4350. Study, Guy. "Where architectural beauty and utility are combined." *Nation's Sch* 7:64-6 Ap '31. plans, il
A brief history of Mary Institute, St. Louis, and a brief description of the building.

Nebraska

4351. *American Educational Digest.* "*The Grand Island High School.*" *Am Educ Digest* 48:154-6 D '28. plans, il
A description of a $350,000 high-school plant.

4352. Helleberg, John P. "Nebraska city builds three-story addition to its high school." *Nation's Sch* 4:59-62 Ag '29
Description of the high school at Lexington, Nebraska, showing how a new addition conforms to the style of the old building.

New Hampshire

4353. Loring, Charles G. "Some interesting New England schoolhouses." *Am Sch Bd J* 79:49-52 N '29
Three buildings designed by the same architect are described briefly.

New Jersey

4354. *American Architect.* "Memorial High School, Haddonfield, New Jersey." *Am Arch* 134:185-6 Ag 5 '28. plans, il
Gives picture and floor plans of a high-school building.

4355. *American School Board Journal.* "Columbia High School, South Orange and Maplewood, New Jersey." *Am Sch Bd J* 76:52-6 Ja '28. plans, il
Description of a fine modern $1,500,000 high school caring for 1,630 pupils.

4356. "The West Side High School, Newark, New Jersey." *Am Sch Bd J* 78:43-4 Ja '29. plans, il
A very brief description of a new high-school building, with a capacity of 1,238, which was erected at a cost of $947,300, or 48¢ per cu. ft.

4357. "The Dumont High School at Dumont, New Jersey." *Am Sch Bd J* 80:60-2 F '30. plans, il
A very brief description of the Dumont High School building.

4358. Betelle, James O. "The unusual school system of a suburban community." *Am Sch and Univ* 1928-29:81-5. plans, il
General description of school buildings of South Orange, New Jersey, with particular attention to the Columbia School. Principal types of equipment are listed.

4359. Pierson, John Noble. "The Scotch Plains High School." *Am Sch Bd J* 76:61-2, 154 My '28. plans, il
A detailed description of a fire-proof building, the total cost of which was $270,000, or 35¢ per cu. ft.

4360. Sibley, Ernest. "A high school building which reflects the dignity of its community." *Am Sch and Univ* 1928-29:119-21. plans, il
Description of the high-school building at Orange, New Jersey, a large building located on a restricted site.

4361. Sibley, Gabrielle Evans. "Little schools for little people." *Am Sch Bd J* 76:57-64, 143-4 Ap '28. plans, il
A discussion of one-story buildings and of those built and equipped for primary grades. A number of good schools are presented in detail.

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New York

4362. *American Architect.* "Catholic High School, Brooklyn, New York." *Am Arch* 135:753-64 Je 5 '29. plans, il
Gives pictures and floor plans.

4363. *American School Board Journal.* "The Kibler High School, Tonawanda, New York." *Am Sch Bd J* 77:49-50 N '28
A very brief discussion of a $650,000 building.

4364. "Washington Irving High School, Tarrytown, New York." *Am Sch Bd J* 78:41-3 Ja '29
A very brief description of a high-school building, which cost $528,581, or 47.75¢ per cu. ft.

4365. "A schoolhouse in the 'functional' style." *Am Sch Bd J* 82:76 Je '31. il
Description of the Hessian Hills School at Croton-on-Hudson, New York, designed for the side of a hill. Roof terraces, elimination of unnecessary stairs, and peculiar exterior design are features of this building.

4366. Engelhardt, N. L. "A new high school on a seventeen-acre site in White Plains, New York." *Am Sch and Univ* 1929-30:68-72. plans, il
Story of the development of the plans for and the construction of the high school at White Plains, and a description of the building.

4367. Gompert, William H. "The DeWitt Clinton High School, New York City." *Am Sch Bd J* 81:57-9, 146 Jl '30. plans, il
Description of a building housing 5,700 pupils, erected at a cost of $3,912,512, or 45¢ per cu. ft.

4368. Hayward, William R. "High-school building constructed according to teachers' plans." *Sch Life* 14:124-7 Mr '29
Description of the Theodore Roosevelt High School building, New York City.

4369. Kamprath, William B. "The new Burgard Vocational High School." *Sch M* 13:1-4 S '30. il
General description and special features of a new 1,000-pupil-capacity, three-story, vocational high school of Buffalo.

4370. Shiebler, Howard A. "The Grover Cleveland High School of New York City." *Am Sch Bd J* 84:41-2, 92, 95 F '32. plans, il
Description of the special features of a new two-million-dollar, 4,000-student-capacity, high-school building for Grades IX and X.

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North Carolina

4371. *American Educational Digest.* "The High Point High School." *Am Educ Digest* 47:442-4 Je '28. plans
Description of the building at High Point, North Carolina, and story of the development of the building plan.

4372. Barton, Harry. "The High Point High School building." *Am Sch and Univ* 1928-29:112-14. plans, il
Description of the High Point, North Carolina, building, which is built to fit the topography of the site. Floors are wood over concrete slab.

4373. Ellington, Douglas D. "The new senior high school of Asheville, North Carolina." *Arch Rec* 66:193-204 S '29. plans, il
Tells of the development of the building program for this *Y*-type high-school building and gives a good description of it.

4374. Sayre, C. Gadsden. "The Boyden High School, Salisbury, North Carolina." *Am Sch and Univ* 1928-29:102-5. plans, il
Brief description of a $535,000 building, which has a capacity of 1,000, and cost 29¢ per cu. ft.

4375. Stillwell, Erle G. "The Hendersonville High School." *Am Sch and Univ* 1928-29:106-8. plans, il
Floor plan and five photographs of the building. Principal types of equipment installed are listed.

4376. Topping, John D. "Asheville's new senior high school and its 46-acre site." *Am Sch and Univ* 1929-30:75-80. plans, il
Description and story of the construction of this North Carolina $1,000,000 building. Lists the principal types of equipment installed.

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Ohio

4377. Berry, M. M. "The Berea High School, Berea, Ohio." *Am Sch Bd J* 78:49-51, 152 Ap '29. plans, il
Story of the planning and building of a $650,000 school edifice which accommodates 1,500. Details of the plans are given.

4378. Charles, Fred. "John Hay High School building." *H Sch Teach* 6:157-8 Ap '30
Story of the building of the John Hay High School in Cleveland. A description of this $1,800,000 building is given.

4379. Hopkinson, George M. "The John Hay High School." *Am Sch Bd J* 80:57-9 F '30. plans, il
Presents in detail the building and equipment of this school.

4380. Kirsch, R. G. "The new Central Catholic High School, Toledo, Ohio." *Am Sch and Univ* 1930-31:84-8. plans, il
A good description of a building which has a capacity of 1,500 pupils. Principal types of equipment installed are listed.

4381. Longnecker, Don D. "Fairview High School." *H Sch Teach* 6:375-6 N '30. il
A brief description of a Dayton, Ohio, high school which cost $400,000.

4382. *School Executives Magazine.* "The Kirtland Centralized School." *Sch Executives M* 48:300-1 Mr '29. plans, il
A brief description of the school building at Kirtland, Ohio.

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Pennsylvania

4383. *American School Board Journal.* "The new Harrisburg high schools." *Am Sch Bd J* 76:83-7, 166, 168, 171 Ja '28. plans, il
Description of Harrisburg's two new high-school buildings.

4384. "The Cumberland Township High School, Carmichaels, Pennsylvania." *Am Sch Bd J* 82:55-6, 134 Je '31. plans, il
Description of a three-story senior-high-school building for a small community.

4385. Craig, C. M. "Senior High School, Reading, Pennsylvania." *Am Arch* 134: 47-50 Jl 5 '28. plans, il
Description of a building of 3,500,000 cu. ft. which cost 37¢ per cu. ft.

4386. Dagit, Charles E. "A 'First Class Type A' fireproof school—St. Madeleine Sophie's School, Philadelphia." *Am Sch and Univ* 1931-32:58-9. plans, il
A good description of the school. The principal types of equipment installed are listed.

4387. Martin, E. William. "A school that satisfies civic as well as educational needs." *Nation's Sch* 8:33-7 O '31. plans, il
Description and plans of a $136,000 consolidated school building for Sellersville and Perkasie, Pennsylvania.

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Rhode Island

4388. *American School Board Journal.* "The Pawtucket Senior High School, Pawtucket, R. I." *Am Sch Bd J* 81:55-6, 128 O '30. plans, il
Description of a 1,400-capacity senior-high-school building in colonial style erected at a total cost of $1,700,000.

Tennessee

4389. Robinson, Ross N. "Dobyns-Bennett High School, Kingsport, Tennessee." *Am Sch Bd J* 76:60-1, 152, 154 My '28. plans, il
A description of a $250,000 high-school building.

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Texas

4390. *American School Board Journal.* "Realizing all the advantages of grouped schools." *Am Sch Bd J* 83:49-51 Ag '31. plans, il
Gives floor plans and illustrations of an elementary school and a junior high school grouped together with a senior high school at Alamo Heights, Texas.

4391. "Interior views of the Brownsville Junior College High School, Brownsville, Texas." *Am Sch Bd J* 83:55 Ag '31. il
Description of a $350,000 building for 300 high-school students and 150 junior-college students.

4392. "Three Texas school buildings." *Am Sch Bd J* 84:47-8 Mr '32. plans, il
Short descriptions of (1) the San Angelo Junior College, San Angelo, Texas; (2) the San Benito High School, San Benito, Texas; and (3) the South San Antonio High School, South San Antonio, Texas.

4393. Boyle, L. F. "Coöperative effort secret of our community's progress." *Tex Outlook* 15:45 Ag '31. il
Describes the gymnasium and poultry plant of the Kelsey School at Gilmer, Texas.

4394. DeWitt, Roscoe P. "Texas school buildings of note." *Am Sch Bd J* 76:57-64 Mr '28. plans, il
A presentation of the buildings in Texas recently produced by the firm of architects of which the author is a member. Many economies are presented.

4395. Lemmon, Mark. "Two new Texas high schools." *Am Sch and Univ* 1928-29: 109-11. plans
Description of the Woodrow Wilson High School, Dallas, Texas, and the Thomas Jefferson Junior High School, Port Arthur, Texas.

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Utah

4396. Barker, Howard. "Efficiency distinguishes Salt Lake City's new high school." *Am Sch Bd J* 84:41-4, 95-6 Mr '32. plans, il
Describes in detail the new million-dollar, 1,900-pupil-capacity, South High School building of Salt Lake City and stresses the construction and finish, sound deadening provisions, natural and artificial lighting, and the unit-split ventilating system.

Vermont

4397. *American School Board Journal.* "The Peoples Academy—Copely building." *Am Sch Bd J* 82:54-6 Ap '31. plans, il
A history of Peoples Academy, Morrisville, Vermont, and a description of the building.

Virginia

4398. *American School Board Journal.* "The Lucy Addison High School, Roanoke, Virginia." *Am Sch Bd J* 80:63-4 Je '30. plans, il

A description of a 700-capacity high-school building for colored students, costing $168,000, or 27¢ per cu. ft.

4399. Beeson, D. R. "A high school that serves two Virginia towns." *Nation's Sch* 7:69-73 Ja '31. plans, il

A description of the high-school building, with a capacity of 1,000 pupils, at Radford, Virginia.

West Virginia

4400. *American School Board Journal.* "The Morgantown High School, Morgantown, West Virginia." *Am Sch Bd J* 78:65-6, 142 Je '29. plans, il

Description of a group of four buildings costing slightly less than $900,000.

4401. "The Garnet High School, Charleston, West Virginia." *Am Sch Bd J* 79:56, 59 O '29. plans, il

Description of a community center school for negro people. This school cost $235,000, or 24.5¢ per cu. ft.

4402. *School Executives Magazine.* "School buildings for smaller communities." *Sch Executives M* 48:204-6 Ja '29. il

Descriptions of three buildings in the following communities: Seth, West Virginia; Bloomfield, New Jersey; and Brinkley, Arkansas.

Wisconsin

4403. *American School Board Journal.* "Vocational School, Green Bay, Wisconsin." *Am Sch Bd J* 83:53-4, 124 Jl '31. plans, il

Plans, illustrations, and detailed costs of a 750-capacity building.

4404. Childs, Frank A. "Lincoln High School and field house, Wisconsin Rapids, Wisconsin." *Am Sch Bd J* 83:41-5, 82, 84, 87 N '31. plans, il

Describes a 24-classroom building for an enrollment of 1,200, including a large combination field house, gymnasium, and auditorium.

4405. Longanecker, F. M. "The Washington Park and William Horlick senior high schools of Racine, Wisconsin." *Am Sch Bd J* 82:57-62, 140, 142 Ja '31. plans, il

Discussion of the building program of Racine following the close of the war, giving a detailed description with several photographs of special features of these two senior high schools.

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JUNIOR-SENIOR HIGH-SCHOOL BUILDINGS

Alabama

4406. *American School Board Journal.* "The Piedmont Junior-Senior High School." *Am Sch Bd J* 82:54 My '31. plans, il

Very brief description of a $62,500 building at Piedmont, Alabama.

California

4407. Watrous, Valerie. "Los Angeles builds another major high school." *Am Sch Bd J* 84:44-5 F '32. plans, il

Description of the new Alexander Hamilton six-year high-school building, having a capacity of 1,600 pupils, which was erected at a cost of 19¢ per cu. ft.

Kansas

4408. Allbaugh, Edgar B. and Thomas, Oren. "The Concordia, Kansas, junior-senior high school." *Am Sch Bd J* 82:39-42, 134, 137 Ja '31. plans, il
Description of a $340,000 high-school building in Georgian-colonial style of architecture.

Maine

4409. *American School Board Journal.* "The William G. Crosby High School, Belfast, Maine." *Am Sch Bd J* 76:64 Je '28. plans, il
A description of this $203,478 school with very little detail.

Massachusetts

4410. *American Architect.* "Franklin High School, Franklin, Massachusetts." *Am Arch* 132:689-90 N 20 '27
Plans and illustrations only.

4411. *American School Board Journal.* "A civic group of note." *Am Sch Bd J* 78: 80-2, 156 Ja '29. plans, il
A description of a $90,000 building combining under one roof a town office, a municipal auditorium, and a junior-senior high-school building.

4412. "The Rockland High School, Rockland, Massachusetts." *Am Sch Bd J* 79: 51-2 O '29. plans, il
Description of a $350,000 building designed to house a junior high school and a senior high school under one roof.

Michigan

4413. Haas, George J. "Architectural planning of Grosse Pointe High School." *Nation's Sch* 1:32-4 My '28. plans
Story of the way in which this building was planned to meet the peculiar needs of this district. A description of the building is given.

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Missouri

4414. Bell, Leslie H. "The Lexington Junior-Senior High School." *Am Sch Bd J* 77:52, 110 D '28. plans, il
Brief description of this $140,000 building.

4415. Holbrook, Mary. "The Normandy High School." *Am Sch Bd J* 82:49-50, 130 My '31. plans, il
Story of the building of the school plant for Normandy, Missouri, and a description of part of the plant.

Montana

4416. *School Executives Magazine.* "Rebuilding on the 6-3-3 plan." *Sch Executives M* 48:444-6 Je '29. plans, il
Story of the rebuilding program of Glasgow, Montana, and a brief description of the building.

New Jersey

4417. Hacker, Myra C. "A school that provides for both social and scholastic needs." *Nation's Sch* 6:51-6 O '30. plans, il
A rather detailed description of the high-school building at Teaneck, New Jersey.

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New York

4418. *American School Board Journal.* "A complete high-school building." *Am Sch Bd J* 80:59-60 Ap '30. plans, il

A brief description of the high school at Waterloo, New York, which has a capacity of 1,000, and was erected at a cost of $3,078,000, or 30¢ per cu. ft.

4419. "A high school planned for expansion." *Am Sch Bd J* 82:55-6 Mr '31. plans, il

A description of the high-school building at Great Neck, Long Island, New York. This school has 1,332 pupil stations, and cost $907,000, or 46.5¢ per cu. ft.

4420. Rogers, Palmer. "Unusual features in the plan and design of this modern school." *Nation's Sch* 3:63-70 My '29. plans, il

Presents Northside High School, Corning, New York, as an economical structure with artistic details so handled that the building was a prize winner in a nation-wide contest.

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Ohio

4421. Dawson, Ruth. "The building program of the Akron, Ohio, schools." *Am Sch Bd J* 77:57-64 Jl '28. plans, il

Statement of the building policy of Akron together with a tabular detailed description of a number of its school buildings.

Pennsylvania

4422. *American School Board Journal.* "The Quakertown High School." *Am Sch Bd J* 80:60-1, 146 Ap '30. plans, il

Details of a *U*-shaped building of brick and stone, with a capacity of 500, which was erected at a cost of $160,000, or 23¢ per cu. ft.

4423. "A school planned for economy and flexibility." *Am Sch Bd J* 83:46-8 O '31. plans, il

Description of the new Donora, Pennsylvania, junior-senior high school.

Texas

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4394

Vermont

4424. *American School Board Journal.* "Building a school to fit a community." *Am Sch Bd J* 84:57-9, 93 Ja '32. plans, il

Description of the high- and junior-high-school building of Springfield, Vermont.

Washington

4425. Hill; Mock; and Morrison. "A new school within old walls." *Nation's Sch* 8:35-40 Jl '31. plans, il

Detailed description of a rebuilt junior-senior high school at Puyallup, Washington.

Wisconsin

4426. Dixon, John. "The new West High School, Madison, Wisconsin." *Am Sch Bd J* 82:77-80, 129 Ja '31. plans, il

Describes a well-planned, flexible, junior-senior high-school building with a low unit cost, which has a capacity of 1,500 pupils and is designed for wide public use.

JUNIOR-HIGH-SCHOOL BUILDINGS

California

4427. Childs, W. P. "The South Pasadena Junior High School." *Am Sch Bd J* 78: 45-8, 161 Ja '29. plans, il

A detailed description of the building including heating and special features. The building has a capacity of 1,000, and was erected at a cost of $409,053.64, or 20¢ per cu. ft.

4428. *Sierra Educational News.* "South Pasadena Junior High School." *Sierra Educ News* 25:38, 64 Ja '29. il

Very brief statement about the building.

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Illinois

4429. *American Educational Digest.* "The Abraham Lincoln building." *Am Educ Digest* 47:272, 274 F '28. il

A description of a $1,148,600 junior high school in Rockford, Illinois.

4430. *American School Board Journal.* "Decatur solves junior-high-school construction program." *Am Sch Bd J* 81:49-54 Ag '30. plans, il

A discussion of the needs and program for school buildings in the city of Decatur. Descriptions of a number of junior high schools of the city are included.

4431. Jensen, Frank A. "The Abraham Lincoln Junior High School." *Am Sch Bd J* 76:57-9, 150, 152 My '28. plans, il

A detailed description of a $1,000,000 Rockford, Illinois, school.

4432. Mahoney, Lewis A. "John Deere Junior High School, Moline, Illinois." *Am Sch Bd J* 83:53-5, 122 S '31. plans, il

Rather complete description of this new *U*-type $560,000 junior high school.

4433. Yardley, Ralph W. "The development of the junior high school in Chicago." *Arch Rec* 69:435-42 My '31. plans, il

Gives some of the history of the development of the elementary and high-school curriculum and of the demands for junior high schools, and tells of the construction requirements for junior-high-school buildings in Chicago.

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Iowa

4434. Brooks, W. G. "Burlington building program includes junior-high-school organization." *Am Sch Bd J* 84:40-2, 105 Ja '32. plans, il

Description of a building program for Burlington, Iowa, worked out by the College of Education of the University of Iowa. Plans and illustrations of the Oak Street and Horace Mann junior high schools are given.

Kentucky

4435. Colley, J. Meyrick. "Louisville's new system of junior high schools." *Am Sch and Univ* 1928-29:78-80. plans, il
A description of the Highland Junior High School of Louisville, Kentucky. Types of equipment installed are listed.

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Louisiana

4436. *American Architect.* "Junior High School, Baton Rouge, Louisiana." *Am Arch* 133:329-30 Mr 5 '28. plans, il
Gives picture and plans.

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Massachusetts

4437. *American Educational Digest.* "Arlington Junior High School." *Am Educ Digest* 47:124-5 N '27. plans, il
Description of a proposed junior-high-school building at Arlington, Massachusetts.

4438. *American School Board Journal.* "A complete junior-high-school building." *Am Sch Bd J* 77:55-7 S '28. plans, il
A detailed description of the Garfield School at Revere, Massachusetts, which was built at a cost of $300,000, or 44¢ per cu. ft.

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Michigan

4439. *Architectural Forum.* "Three junior high schools." *Arch Forum* 55:693-700 D '31. plans, il
Gives pictures and a brief description of junior high schools in East Cleveland, Ohio; East Orange, New Jersey; and Hamtramck, Michigan.

4440. Harris, James H. and Ittner, William B. "Pontiac completes balanced building program." *Am Sch Bd J* 83:41-5, 92 O '31. plans, il
Discusses the building program of Pontiac, Michigan, and describes in detail the Lincoln Junior High School and the Whittier Elementary School.

4441. Jay, John A. "Integration of educational and architectural planning illustrated." *Am Sch Bd J* 84:36-9, 102 Ja '32. plans, il
Detailed description of the Copernicus Junior High School at Hamtramck, Michigan, pointing out specific features of the building designed to provide maximum integration of educational and architectural planning.

4442. Lyman, R. L. "The Walter H. French Junior High School of Lansing, Michigan." *Sch R* 37:433-50 Je '29
A description of the plant and facilities of this high school.

4443. Moehlman, Arthur B. "An unusual school in an unusual community." *Nation's Sch* 8:33-40 D '31. plans, il
Plans and description of the Copernicus Junior High School, Hamtramck, Michigan.

4444. Shigley, Arthur R. "A study in junior-high-school construction." *Nation's Sch* 1:55-60 My '28. plans, il

Gives the plan of the junior-high-school building at Alma, Michigan. Illustrations are good.

4445. Wetzel, B. C., and Company. "Simplicity and compactness feature the architectural plan." *Nation's Sch* 8:40-2 D '31

Further description of the Copernicus Junior High School, Hamtramck, Michigan. (See no. 4443.)

Minnesota

4446. Berg, Elwin H. "School architecture with particular reference to the design of the Virginia, Minnesota, junior high school." *Am Arch* 135:491-8 Ap 20 '29. plans, il

A description of a high school which provides for a high degree of segregation of sexes. Mechanical features are discussed.

New Jersey

4447. *American City.* "Imposing structure in adequate school building program." *Am City* 39:144 S '28. il

Description of the junior-high-school building at Trenton, New Jersey.

4448. Starrett and Van Vleck. "George Inness Junior High School, Montclair." *Am Sch and Univ* 1928-29:86-7. plans, il

A brief discussion of the school and a list of the principal types of equipment used.

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New York

4449. *American School Board Journal.* "Isaac E. Young Junior High School, New Rochelle, New York." *Am Sch Bd J* 80:57-8 Ap '30. plans, il

A detailed description of the above school, which cost $1,011,531.73. Relation of plan to contour of the site is presented.

4450. Burdick, Raymond C. "A junior-high-school building program." *Jr-Sr H Sch Clearing House* 4:229-32 D '29

Story of the building of two junior high schools in Watertown, New York.

4451. *School Executives Magazine.* "A distinctive school setting." *Sch Executives M* 50:131 N '30. il

Description of the Isaac E. Young Junior High School, New Rochelle, New York.

North Carolina

4452. Hill, Arthur. "Piedmont Junior High School, Charlotte, North Carolina." *Am Sch and Univ* 1928-29:88-9. il

A description of a modern school building in Charlotte, something of the interior arrangement, and a list of the principal types of equipment installed.

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Ohio

4453. *American School Board Journal.* "The Monticello Junior High School at Cleveland Heights, Ohio." *Am Sch Bd J* 82:49-50 F '31. plans, il
Description of a new 1,000-pupil-capacity, colonial-type, $550,000, junior-high-school building.

4454. "The Kirk Junior High School, East Cleveland, Ohio." *Am Sch Bd J* 82:49-51 Je '31. plans, il
Describes a building of three semi-detached parts, housing 2,200 students, erected at a cost of $564 per pupil, or 49¢ per cu. ft.

4455. Halperin, M. P. "A school building that harmonizes with the homes it serves." *Nation's Sch* 8:36-9 Ag '31. plans, il
Description of a new junior high school of Cleveland Heights, Ohio, with 21 classrooms, erected at a total cost of $550,000.

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Pennsylvania

4456. *American Educational Digest.* "George Washington Junior High School." *Am Educ Digest* 47:501-3 Jl '28. plans, il
A description of a large junior-high-school building in New Castle, Pennsylvania.

4457. *American School Board Journal.* "The George Washington Junior High School, New Castle, Pennsylvania." *Am Sch Bd J* 79:53-4 N '29. plans, il
A brief description of a building which has a capacity of 1,200 and cost $565,000, or 29¢ per cu. ft.

4458. Moore, G. O. "Wilson Junior High School at Erie." *Am Sch Bd J* 76:68-71, 174 Ja '28. plans, il
Description of a $650,000 building is given in some detail. The cost per cu. ft. was 29.7¢.

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Rhode Island

4459. *American Educational Digest.* "Elmgrove Junior High School." *Am Educ Digest* 47:539-41 Ag '28. plans
Description of the Elmgrove building in Providence, Rhode Island.

Tennessee

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2440

Texas

4460. *American School Board Journal.* "A Texas community school plant—the Edinburg, Texas, consolidated school." *Am Sch Bd J* 75:49-60 D '27. plans, il
Story of the reconstruction of the entire plant of Edinburg, its development, and some details of the buildings and equipment.

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4390 4895

Virginia

4461. *American School Board Journal.* "The Northside Junior High School, Richmond, Virginia." *Am Sch Bd J* 79:49-50, 134 O '29. plans, il

Describes the building and discusses materials, construction, arrangement, and costs. The cost of erection was $453,474, or 26.1¢ per cu. ft.

Washington

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Wisconsin

4462. *American School Board Journal.* "Construction data for the junior high school, Waukesha, Wisconsin." *Am Sch Bd J* 77:52-3 N '28

A table of construction data for a junior-high-school building, which was erected at a cost of $160,000, or 24¢ per cu. ft.

ELEMENTARY SCHOOL BUILDINGS

Alabama

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4607

Arizona

4463. Barnhill, O. H. "Tuscon builds modern schoolhouses." *Am Sch Bd J* 79:62-3, 104, 106 S '29. plans, il

The story of the way in which Tuscon met the needs of a growing city in the educational care of its children.

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Arkansas

4464. *American School and University.* "Trusty Elementary School, Fort Smith, Arkansas." *Am Sch and Univ* 1931-32:31. plans, il

Gives a good description of the building and shows floor plans.

California

4465. *American Architect.* "Union Grammar School, Campbell, California." *Am Arch* 132:681-2 N 20 '27

Plans and illustrations only.

4466. *American School and University.* "Daniel Webster School, Pasadena, California." *Am Sch and Univ* 1931-32:32, 209. plans, il

Gives a description of and plans for a $121,200 elementary building, which was erected at a per cu. ft. cost of 25¢.

4467. "Elementary school, Sierra Madre, California." *Am Sch and Univ* 1931-32:33. plans, il

Description of a building which has a corrective room adjacent to a sun porch instead of a gymnasium. The cost of the building was 20¢ per cu. ft.

4468. *American School Board Journal.* "The one-story school at its best, the Columbia School, El Monte, California." *Am Sch Bd J* 80:79, 158 Ja '30. plans, il

A 30-unit, Spanish colonial type, 800-capacity building erected at a cost of $165,000.

4469. "The Lincoln School, Riverside, California." *Am Sch Bd J* 81:53, 123 N '30. il

Description of an elementary school with a capacity of 400. This building is of concrete structure, and was erected at a total cost of $90,031.

4470. *Architectural Forum.* "Thirteen elementary schools." *Arch Forum* 55:701-24 D '31. plans, il

Pictures and brief descriptions of schools in Beverly Hills, California; Shorewood, Wisconsin; Lansdowne, Pennsylvania; Boonton, New Jersey; Teaneck, New Jersey; Syracuse, New York; Denver, Colorado; Hewlett, New York; Newton, Massachusetts; East Rochester, New York; Winona, Minnesota; Erie, Pennsylvania; and Gaviota, California.

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Colorado

4471. *American School and University.* "Bryant-Webster School, Denver, Colorado." *Am Sch and Univ* 1931-32:34. plans, il

The movable equipment for the school cost $13,000. The per cu. ft. cost was 25.2¢.

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4470

Connecticut

4472. *Connecticut Schools.* "The new Burnham School in Bridgewater." *Conn Sch* 12:8-9 N '30. il

Brief description of the small Connecticut elementary school building.

4473. Mills, Lewis S. "A Connecticut consolidated school." *Am Sch Bd J* 80:62 Ap '30. plans, il

A very brief statement concerning the construction of a $31,000 school at Avon, Connecticut.

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District of Columbia

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Illinois

4474. *American Architect.* "Cossitt Avenue School, La Grange, Illinois." *Am Arch* 133:97-100 Ja 20 '28. plans, il

Pictures and floor plans are given.

4475. *American School Board Journal.* "The new Edison School, Rock Island, Illinois." *Am Sch Bd J* 78:78-9 Ja '29. plans, il

A brief description of a building costing 27¢ per cu. ft., which was designed to expand eventually into a complete elementary and junior high school.

4476. "Three interesting school buildings." *Am Sch Bd J* 79:59-61 S '29. plans, il

A description of a graded school at St. Charles, Illinois, a one-teacher school, and a two-room country school near there.

4477. "The Braeside School, Highland Park." *Am Sch Bd J* 81:61 S '30. plans, il

A very brief description of the school.

4478. "The Sharp Corner School, Niles Center, Illinois." *Am Sch Bd J* 81:54-5 N '30. plans, il

Description of a 250-capacity graded school of American-Georgian style, designed for extended additions, and erected at a cost of $75,101. Plans for future units are included.

4479. Beck, H. Frederick. "An economical grade school building." *Am Sch Bd J* 81: 62-3 Jl '30. plans, il

A 17-room building at Harvey, Illinois, is described, the capacity of which is 680, and the cost $176,000, or 28¢ per cu. ft.

4480. Coultrap, H. M. "Combining good construction with educational completeness." *Am Sch Bd J* 80:57-8 Je '30. plans, il

A description of the $74,000 Harrison Street School in Geneva, Illinois, which has a capacity of 210.

4481. Hagan, J. J. "A grade school in modernistic style." *Am Sch Bd J* 82:75-6 Ja '31. plans, il

Description of the new six-grade elementary Denkmann School of Rock Island, Illinois, constructed at a cost of 26¢ per cu. ft.

4482. Llewellyn, Joseph C. "C. M. Bardwell Elementary School, Aurora, Illinois." *Am Sch Bd J* 80:43-4 Ja '30. plans, il

Brief description of facilities of the building and costs of construction.

4483. "Elementary school, Downers Grove, Illinois." *Am Sch Bd J* 80:44 Ja '30. plans, il

Gives the plans of the building.

4484. "Oak Avenue School, LaGrange, Illinois." *Am Sch Bd J* 80:44, 162 Ja '30. plans, il

Gives plans and brief description of the building.

4485. McDade, James E. "The educational aspect at the World's Fair school building." *Bul of Dept of Supt of the N.E.A.* (Official report) 1932:64-6

Points out the educational specifications embodied in the plan for the model school.

4486. Morse, Lucia Burton. "The school building articulates with education." *Progressive Educ* 9:7-15 Ja '32. il

Description and illustrations of the Avery Coonley School at Downers Grove, Illinois—an experimental elementary school.

4487. Rogers, Don C. "Planning the 1933 World's Fair model elementary school building." *Bul of the Dept of Supt of the N.E.A.* (Official report) 1932:60-4. plans

Description of a model school building.

4488. *School and Society.* "Model school at the World's Fair." *Sch and Soc* 35:422 Mr 26 '32

Brief description of the model six-grade elementary school being erected at the Chicago World's Fair.

4489. Waldo, K. D. "The C. M. Bardwell Elementary School at Aurora, Illinois." *Sch Executives M* 49:316-18 Mr '30. plans, il

Plans and illustrations of a 25-classroom building.

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Indiana

4490. *American School Board Journal.* "Two Indianapolis schools." *Am Sch Bd J* 83:46-7, 87 N. '31. plans, il

Schools no. 62 and no. 80 are described as typical of the ideals embodied in the newer buildings of Indianapolis.

4491. Teague, Walter Dorwin. "Proposed Orchard School in Indianapolis." *Arch Rec* 70:413-15 D '31. plans, il

Description of a hollow tile building faced with stucco. A roof playground is a feature.

Iowa

4492. *Modern Public Buildings.* "Hawthorne Grade School, Waterloo, Iowa." *Modern Pub Bldgs* 2:25-6 Ja '28. plans, il

Brief description of a 12-classroom grade-school building.

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Kansas

4493. *American Educational Digest.* "Horace Mann School." *Am Educ Digest* 47: 306-8 Mr '28. plans, il

Describes the elementary teacher training school on the campus of the State Teachers College at Pittsburg, Kansas.

4494. *American School Board Journal.* "The Central Grade School at Dodge City, Kansas." *Am Sch Bd J* 78:63-4 Je '29. plans, il

A brief description of a fireproof building costing only 24.7¢ per cu. ft. the total cost being $132,055.

Kentucky

4495. *American School Board Journal.* "The Athens Consolidated School at Athens, Kentucky." *Am Sch Bd J* 78:64 My '29. plans, il

One-story, four-classroom, rural school with auditorium-gymnasium, erected at a cost of $45,000.

Louisiana

4496. *American Architect.* "Louisiana Avenue School, Shreveport, Louisiana." *Am Arch* 133:349-50 Mr 5 '28. plans, il

Picture and plans are given.

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Maryland

4497. *American Educational Digest.* "Progress in the Baltimore schools." *Am Educ Digest* 47:396-8 My '28. plans, il

Description of some of the buildings of Baltimore and a discussion of the holding effects of building and equipment upon pupils.

Massachusetts

4498. *American School and University.* "Wyman School, Winchester, Massachusetts." *Am Sch and Univ* 1931-32:35, 210. plans, il
A description of this *T*-shaped elementary building which cost 39¢ per cu. ft.

4499. *American School Board Journal.* "Center Elementary School, Longmeadow, Massachusetts." *Am Sch Bd J* 82:51-2 My '31. plans, il
A brief description of a $125,000 school building.

4500. *Architectural Record.* "Portfolio of current architecture." *Arch Rec* 69:389-409 My '31. plans, il
A series of pictures of elementary and high-school buildings located in different parts of the country. Some plans are shown.

4501. Maloney, Morris W. "High quality in small schoolhouses." *Am Sch Bd J* 76:43-4, 177 Ja '28. plans, il
Description of three small schools taken as typical of good construction among small buildings.

4502. Pratt, C. H. "Southwick Consolidated School." *Am Sch Bd J* 80:63, 148 Ap '30. plans, il
Description of a modern $63,000 elementary school building at Southwick, a village in Massachusetts.

4503. Ritchie, James H. and others. "A school that fits naturally into a community of beautiful homes." *Nation's Sch* 8:35-9 Ja '32
Plans, photographs, and description of the new John Ward Grade School, Newton, Massachusetts.

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Michigan

4504. *American Architect.* "Logan School, Detroit, Michigan." *Am Arch* 134:557-60 O 20 '28. plans, il
Gives pictures and floor plans of a *U*-shaped building.

4505. *American School and University.* "Longfellow Elementary School, Pontiac, Michigan." *Am Sch and Univ* 1931-32:36, 209. plans, il
Description of the building and a floor plan are given. The heating plant is separate. The cost per cu. ft. was 40¢.

4506. *American School Board Journal.* "A corridor-vented schoolhouse—the Benjamin Franklin School at Royal Oak, Michigan." *Am Sch Bd J* 79:55, 146 N '29. plans, il
Description of a building which departs from the usual practice in several details, among which are those of having corridor venting and unit ventilators in all rooms.

4507. "A complete grade school." *Am Sch Bd J* 81:60-1 Jl '30. plans, il
Description of the Charles A. Lindbergh School built in 1928 at a cost of $124,900 in a growing residential district of Dearborn, Michigan. The school has a capacity of 390.

4508. "Planning grade-school buildings for flexibility." *Am Sch Bd J* 81:52-4 O '30. plans, il
Description of Handley and Potter elementary schools of Saginaw, Michigan. In the Handley School special features are duplicate kindergarten suites with workrooms, direct exterior communication to the play terrace along the front, and special classrooms for the physically handicapped. Among special features are the linoleum floors and base in the corridors, kindergarten, offices, and clinic; terrazzo floors in toilets, stairs, landings; and maple floors in classrooms. The cost was $170,000, or 29.38¢ per cu. ft. The Potter School cost $161,000, or 27.5¢ per cu. ft.

4509. Babcock, Earl. "Elementary school, Grand Haven, Michigan." *Am Sch Bd J* 80:77-8 Ja '30. il

Description of the building and equipment including office suite, auditorium-gymnasium, kindergarten, fresh air department, and heating and ventilation systems.

4510. Challman, Samuel A. "Two functionally planned elementary schools." *Am Sch Bd J* 84:43-5, 105-6 Ja '32. plans, il

Features of the Julia Ward Howe School at Minneapolis, Minnesota, and the Brady School at Detroit, both six-year elementary schools.

4511. Childs, Frank A. "Where special class and normal pupils go to school together." *Nation's Sch* 4:37-44 D '29

Description of the Pearl School, Jackson, Michigan, which has been built for the use of special class children and normal pupils at the same time.

4512. Dunning, Neal M. "A Detroit school that incorporates modern features." *Nation's Sch* 3:61-4 Ap '29. plans, il

A description of the Benjamin Nolan Intermediate School with particular attention to ventilation.

4513. "How the structural plan can coincide with the educational layout." *Nation's Sch* 5:65-8 Ja '30. plans, il

Shows how a predetermined educational layout by an educational expert simplified the planning problem for the St. Paul's Parish School at Grosse Pointe, Michigan.

4514. Ittner, William B. "The Jefferson Elementary School, Battle Creek, Michigan." *Am Sch and Univ* 1928-29:95-6. plans, il

A description of a school of the semi-open type. The school has a capacity of 600, and cost $236,473.

4515. Moehlman, Arthur B. "A parish school that is designed for educational needs." *Nation's Sch* 5:61-5 Ja '30. il

A description of St. Paul's Parish School, Grosse Pointe, Michigan. Presents the building in relation to the educational program.

4516. Trout, Alex L. "The Starkweather Elementary School." *Am Sch Bd J* 77: 61-3, 122 O '28. plans, il

Story of the financing and building of the Starkweather Elementary School and a description of the school which was erected at a total cost of $139,269.10, or 35¢ per cu. ft.

4517. Tyler, L. L. "Erecting an intermediate type school on the unit plan." *Nation's Sch* 1:47-9 Mr '28. plans, il

Story of the erection of and a description of the Central School of Muskegon Heights, Michigan.

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Minnesota

4518. *American School Board Journal.* "A useful rural-school building—School no. 100, Cotton, St. Louis County, Minnesota." *Am Sch Bd J* 80:85, 136 Ja '30. plans, il

Describes a two-story brick building, with concrete floors and fire-proof roof, located at Cotton, Minnesota.

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Missouri

4519. Ittner, William B. "The Nathaniel Hawthorne School, University City, Missouri." *Am Sch Bd J* 82:51, 126 Mr '31. plans, il
A description of a $155,000 school.

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New Hampshire

4520. Lewis, Della I. "A platoon school in Concord, New Hampshire." *J Educ* 113: 323-4 Mr 23 '31. il
Tells of the South End Platoon School in Concord, built especially for platoon school organization.

New Jersey

4521. *American School Board Journal.* "Clifton Avenue Grade School, Lakewood, N.J." *Am Sch Bd J* 76:56 Ja '28. plan, il
Plans and illustrations only.

4522. "The Pershing School at Carney's Point." *Am Sch Bd J* 77:53 D '28. il
A very brief description of the building.

4523. "A colonial grade school." *Am Sch Bd J* 79:54 O '29. plans, il
Describes the interesting features of the Washington School at Morristown, New Jersey. This building has a capacity of 288, and cost $114,642, or 48¢ per cu. ft.

4524. Little, W. F. "The Roosevelt School at Rahway, New Jersey." *Am Sch Bd J* 77:54 S '28. plans, il
A very brief description of the Roosevelt School and Rahway's problem.

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New York

4525. *American City.* "The schoolhouse that Owen D. Young gave Van Hornesville." *Am City* 40:118-19 F '29. plan, il
A brief description of the school building at Van Hornesville, New York.

4526. *American School and University.* "Broad Street Grade School, Glens Falls, New York." *Am Sch and Univ* 1931-32:37. plans, il
A description of a $270,000 building, constructed at a per cu. ft. cost of 31.75¢. The movable equipment cost $26,000.

4527. "Elementary School no. 16, Mt. Vernon, New York." *Am Sch and Univ* 1931-32:38. plans, il
Description of a building placed on a site the improvement of which cost $25,000. Dimensions of rooms are given. The cubic-foot cost was 45¢.

4528. "Frank Fowler Dow School, Rochester, New York." *Am Sch and Univ* 1931-32:39. plans, il
Description of a building which cost $325,000 and was constructed on an *L*-shaped plan with the provision for additions to make it *U*-shaped.

4529. *American School Board Journal.* "The Washington Irving School, Syracuse, New York." *Am Sch Bd J* 78:56 Ap '29. plans, il
Very brief description of an elementary building costing 35¢ per cu. ft. in 1926. The total cost was $462,872.

4530. "A combination school for normal and crippled children, The Percy Hughes School, Syracuse, New York." *Am Sch Bd J* 81:59-60, 137 S '30. plans, il

A brief description of a school plant adapted to the use of both normal and crippled children, erected at a cost of $350,000, or 34.59¢ per cu. ft.

4531. "The Krieger School, Poughkeepsie, New York." *Am Sch Bd J* 83:52, 54 Ag '31. plans, il

Brief description of a 19-classroom, elementary, 760-capacity building completed in 1930 at a total cost of $265,000, or 32¢ per cu. ft.

4532. "A grade school which is a community center." *Am Sch Bd J* 84:45-6 Mr '32. plans, il

Brief description of the Parley Coburn School at Elmira, New York.

4533. *Architectural Record.* "Portfolio of current architecture featuring school buildings." *Arch Rec* 68:29-44 Jl '30. il

Pictures of a rural school in New Jersey, high schools in New Jersey, Illinois, and Florida, and elementary schools in New Jersey and New York. Plans are also shown.

4534. Brodie, Robert B. *The passing of Public School 62.* East Side Chamber of Commerce, New York City, 1930. il, 4 p

A brief description of a $4,000,000 building is given together with its history.

4535. Calkins, J. T. P. "One-story schools in a village program of education." *Am Sch Bd J* 84:46-7 Ja '32. plans, il

Brief description of the Jackson and Ludlum elementary schools of Hempstead, New York.

4536. Cummings, George Bain. "A school that is admirably planned for present and future needs." *Nation's Sch* 5:61-5 F '30. plans, il

Description of the Benjamin Franklin School, Binghamton, New York. This is a 40-room building which cost $475,000.

4537. Hueber, Paul. "Beauty and economy are on a par in these three parochial schools." *Nation's Sch* 3:35-9 Ja '29. plans, il

Description of three buildings in which there seems to be no sacrifice for the sake of economy.

4538. Moos, Elizabeth. "A school building that breaks with tradition." *Am Sch and Univ* 1932-33:35-7. plans, il

Description of the Hessian Hills Elementary School at Croton-on-Hudson, New York.

4539. Van Vleck, E. A. "A school in the modern style—the Jefferson School, New Rochelle, New York." *Am Sch and Univ* 1931-32:66-7. il

The description shows that this building is characterized by horizontality of exterior and simplicity of interior.

4540. Welles, James B. "New grade school at Roslyn provides wide range of activities." *Am Sch and Univ* 1929-30:89-90. plans, il

Describes briefly a new grade school at Roslyn Heights, New York.

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North Carolina

4541. *American School and University.* "Ardmore Elementary School, Winston-Salem, North Carolina." *Am Sch and Univ* 1931-32:40. plans, il

Description of a building having one story and a basement. The per cu. ft. cost was 23.7¢.

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North Dakota

4542. *American School and University.* "Emerson H. Smith School, Fargo, North Dakota." *Am Sch and Univ* 1931-32:41. plans, il
Brief description of and floor plans for this *U*-shaped building.

Ohio

4543. *American School Board Journal.* "The College Hill School, Cincinnati, Ohio." *Am Sch Bd J* 77:49-50 S '28. plans, il
A brief discussion of the building problem in cities and a description of a $573,016 school building which has a capacity of 650.

4544. "The Linwood Elementary School, Cincinnati, Ohio." *Am Sch Bd J* 80:76, 158 Ja '30. plans, il
Description of a 500-capacity elementary school building erected at a cost of $352,000.

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Oregon

4545. *American School and University.* "John L. Vestal School, Portland, Oregon." *Am Sch and Univ* 1931-32:42. plans, il
A brief description is given of a building which cost 28.3¢ per cu. ft.

Pennsylvania

4546. *American School and University.* "John Wetherill School, Chester, Pennsylvania." *Am Sch and Univ* 1931-32:43. plans, il
The per cu. ft. cost of the John Wetherill School building was 43.75¢. It is described briefly.

4547. "Lincoln School, Pittsburgh, Pennsylvania." *Am Sch and Univ* 1931-32:44. plans, il
There are two recreation rooms in the building. The cost was $265,000, or 37.7¢ per cu. ft.

4548. *American School Board Journal.* "An interesting consolidated school." *Am Sch Bd J* 79:64 S '29. plans, il
A brief description of the East Pikeland Consolidated School building near Kimberton, Pennsylvania, which was erected at a total cost of $47,365, or 37.5¢ per cu. ft.

4549. "The Spring Mill School." *Am Sch Bd J* 81:64 S '30. plans, il
Description of a four-room school of modern design, planned for enlargement.

4550. "The Sayre High School, Sayre, Pennsylvania." *Am Sch Bd J* 81:52-3 D '30. plans, il
Describes a six-year elementary building with fireproof structure of Gothic design, costing approximately $422,000.

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South Carolina

4551. Wilson, Charles C. "Grammar school planned for present and future needs." *Nation's Sch* 7:35-40 My '31. plans, il
A description of the building and equipment of the Pine Street School, Spartanburg, South Carolina. This building was designed in five sections.

South Dakota

4552. *American Architect.* "Whittier Grade School, Sioux Falls, South Dakota." *Am Arch* 133:137-8 Ja 20 '28. plans, il
Picture and plans of this building are given.

Tennessee

4553. *American School and University.* "Anna B. Lacey School, Hamilton County, Tennessee." *Am Sch and Univ* 1931-32:45, 210. plans, il
The one-story structure cost 16¢ per cu. ft. A gymnasium and swimming pool are in the plans for the future.

4554. *American School Board Journal.* "Beauty and educational efficiency in a consolidated school." *Am Sch Bd J* 83:52-3 Ag '31. plans, il
Description of the consolidated one-story elementary school of Hamilton County, Tennessee. Contains eight classrooms and cost $49,431, or 16¢ per cu. ft., or $169 per pupil on a pupil-capacity basis.

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Texas

4555. *American School Board Journal.* "The Giles School, Beaumont, Texas." *Am Sch Bd J* 79:54-5 O '29. plans, il
Details are briefly given for a school designed to care for Grades I to VII on a platoon plan. The building was erected at a cost of $100,509, or 22.3¢ per cu. ft.

4556. Brown, S. M. "School that is different; sugar land schools." *Tex Outlook* 15:21 Ap '31. plan

4557. Payne, Harry D. "Six new elementary school buildings for the Houston independent school district." *Am Sch and Univ* 1929-30:84-8. plans, il
Describes the general features of the schools and gives briefly the special features of each.

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Virginia

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2296

Washington

4558. *American School and University.* "Daniel Bagley School, Seattle, Washington." *Am Sch and Univ* 1931-32:46. plans, il
Descriptions of a T-shaped building which cost 31.5¢ per cu. ft.

4559. *American School Board Journal.* "The Washington School, Olympia, Washington." *Am Sch Bd J* 81:61-2, 134 S '30. plans, il
Tells something of the building program of the city of Olympia and gives a detailed description of the Washington School, which has a play shed in connection with it. The school cost $135,000, or 22¢ per cu. ft.

Wisconsin

4560. *American School and University.* "Wilson School, Janesville, Wisconsin." *Am Sch and Univ* 1931-32:47. plans, il
A good description of a building, which cost 26¢ per cu. ft.

4561. *American School Board Journal.* "Richard B. Dudgeon Grade School, Madison, Wisconsin." *Am Sch Bd J* 77:51-2 N '28. plans, il

A description of a proposed plant of five units, one of which is finished and shown here.

4562. "A community park and school." *Am Sch Bd J* 83:49-50 Jl '31. plans, il

Description of Wilson School, Janesville, Wisconsin—an elementary school with a capacity of 525. The school cost $200,683, or 26¢ per cu. ft.

4563. Bishop, Fred G. "The functional planning of the school." *Am Sch and Univ* 1932-33:46-7. plans, il

Describes the functional planning of the Joseph Koenig Elementary School building at Two Rivers, Wisconsin.

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Not Classified

4564. Burns, Lloyd R. "A model school building." *Catholic Sch J* 30:173-6 My '30

COMBINED ELEMENTARY AND HIGH-SCHOOL BUILDINGS

Alabama

4565. *American School Board Journal.* "A building that promotes education—the Tallassee School." *Am Sch Bd J* 81:51-2 D '30. plans, il

Describes a $120,000 combined elementary and high school in a community of 6,000. This building has an elementary school in one wing and a high school in the other, with auditorium and administrative departments between.

California

4566. Stephens, William Logan. "The Frances E. Willard Platoon School as organized in Long Beach, California." *Platoon Sch* 1:5-11 O '27. plans, il

Rather complete description of the building and organization for work in this 1,500-pupil-capacity building.

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Colorado

4567. Buell, T. H. "A modern consolidated school on the open prairie." *Nation's Sch* 8:35-9 F '32

Discusses blending the building into its setting and providing for future additions in the new Ovid High School, Ovid, Colorado.

Illinois

4568. *American School Board Journal.* "The Paw Paw Grade and High School, Paw Paw, Illinois." *Am Sch Bd J* 77:54 N '28. plans, il

A description of a $75,000 building for both elementary and secondary pupils, which cost 25¢ per cu. ft.

Indiana

4569. *American School Board Journal.* "The Beiger School, Mishawaka, Indiana." *Am Sch Bd J* 81:63 S '30. plans, il

A very brief description of a school, which has a capacity of 700 and cost $240,000, or 30¢ per cu. ft.

4570. Hamilton, J. L. and Bate, W. G. "The James F. Hibberd School, Richmond, Indiana." *Am Sch Bd J* 76:63-4, 142, 144 My '28. plans, il

Story of the execution of the Richmond building program and description of one unit of the program.

Iowa

4571. Thomas, Oren R. "A complete low-cost school." *Am Sch Bd J* 80:63-5 F '30. plans, il

The writer discusses savings made in the construction of the Montezuma, Iowa, high school. Details of construction are shown.

4572. "Where every inch of space does double duty." *Nation's Sch* 7:47-51 F '31. plans, il

A description of the elementary and high-school building at McGregor, Iowa.

Kansas

4573. Routledge, Chester M. "Building with a view to the future." *Nation's Sch* 6:59-62 D '30. plans, il

A description of the high school at Osborne, Kansas, designed to care for Grades I to XII.

Massachusetts

4574. Mason, Wallace E. "Tisbury School, Vineyard Haven, Massachusetts." *Am Sch Bd J* 82:46-8, 140 Ja '31. plans, il

Description of a consolidated school of three stories, constructed at a cost of $176,587. The building has no gymnasium or auditorium, but provides for commercial work, an opportunity room, home economics, and manual training.

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Michigan

4575. Barshney, R. W. "The school at White Pigeon, Michigan." *Am Sch Bd J* 79:57-8 S '29. plans, il

Description of a one-story $72,914 plant meeting present-day standards.

4576. Warren S. Holmes Company. "Unit construction in school planning." *Arch Rec* 70:398-400 D '31. plans, il

Describes the Lincoln Consolidated School, Ypsilanti, Michigan, and discusses this type of school planning.

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Minnesota

4577. *American Educational Digest.* "Central School building, Rochester, Minnesota." *Am Educ Digest* 47:308-9 Mr '28. il

A brief description of a $330,000 building for Grade I to junior college.

Mississippi

4578. *American School Board Journal.* "An interesting southern school building." *Am Sch Bd J* 82:52 Je '31. plans, il

Describes a combined elementary and high school of Newton, Mississippi. A good example of a one-story building of the *E*-type.

Missouri

4579. *School Executives Magazine.* "Elmo Consolidated School." *Sch Executives M* 48:261 F '29. il

Description of the school building at Elmo, Missouri, and story of its planning.

New Jersey

4580. *American School Board Journal.* "The Passaic Memorial School, Passaic, New Jersey." *Am Sch Bd J* 81:54-6, 84 D '30. plans, il

Description of the Passaic Memorial School, which was completed in 1924, at a total cost of $875,000, or 42¢ to 43¢ per cu. ft. The capacity of the building is 2,200.

New York

4581. *American School Board Journal.* "The new high school at Painted Post, New York." *Am Sch Bd J* 78:59-60, 144 F '29. plans, il

A well-written description of a high school which was built at a cost of 32.5¢ per cu. ft.

4582. "The McGraw High School, McGraw, New York." *Am Sch Bd J* 81:56 N '30. plans, il

Describes a high-school building of Type B construction, having walls of tile faced with tapestry brick and floors of rubberstone tile. This building, which has a capacity of 400, was erected at a cost of $127,000.

4583. "The Celoron School." *Am Sch Bd J* 82:82, 120 Ja '31. plans, il

Description of a 450-pupil-capacity grade and high-school building at Celoron, New York, constructed at a cost of $173,476.

4584. "A notable combination school." *Am Sch Bd J* 82:53, 133-4 F '31. plans, il

Description of a $93,322 combined elementary and high-school building at Bemus Point, New York, housing Grades VII to XII, and having a capacity of 225.

4585. "A consolidated school of distinctive design." *Am Sch Bd J* 82:53-4 Je '31. plans, il

Description of a three-story, fire-proof construction consolidated school at Honeoye Falls, New York, erected at a cost of $200,000, and having a capacity of 540 pupils.

4586. "The consolidated school at its best." *Am Sch Bd J* 83:50-2, 128 Jl '31. plans, il

Description of the Central Rural School at Waterville, New York; built for a capacity of 728 pupils, at a cost of $203,755, or 29.4¢ per cu. ft.

4587. Graham, Robert R. "A new central school building." *Am Sch and Univ* 1932-33:53-5. plans, il

Plans and description of a 1,385-pupil-capacity combined grade and high-school building at Hancock and Tompkins, N. Y.

Ohio

4588. *American School Board Journal.* "The Harris-Elmore School, Elmore, Ohio." *Am Sch Bd J* 76:63 Je '28. plans, il

A very brief description of a rural school, which was erected at a cost of $172,000, or 30¢ per cu. ft.

4589. "The Ottowa Hills School." *Am Sch Bd J* 82:53-4 My '31. plans, il

Description of a combination building for kindergarten to Grade XII, which cost $162,000, or 30.5¢ per cu. ft.

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Pennsylvania

4590. *American School Board Journal.* "The Oley Township Consolidated School in Berks County, Pennsylvania." *Am Sch Bd J* 83:47-8 D '31. plans, il
Description of a 24-unit combined elementary and high-school building with a combined auditorium-gymnasium.

4591. Phillips, Watson K. "Small Pennsylvania schoolhouses." *Am Sch Bd J* 80:57-62, 127 Mr '30. plans, il
Brings out difficult problems facing the architect who plans small school buildings. A number of township and small town buildings are described.

Tennessee

4592. Chenault, Robert N. "How a dream transformed education in this Tennessee town." *Nation's Sch* 8:33-40 N '31. plans, il
Plans, illustrations, and brief description of a school-house built as a World War memorial.

Texas

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Washington

4593. *American Educational Digest.* "The Longview Complete School." *Am Educ Digest* 47:199-201 Ja '28. plans, il
Description of a 12-year school unit of Longview, Washington.

4594. Ittner, William B. "The Robert A. Long Complete School, Longview, Washington." *Am Sch and Univ* 1928-29:69-70
Lists the outstanding features of a building providing for kindergarten to Grade XII.

ONE-, TWO-, THREE-, AND FOUR-ROOM RURAL SCHOOL BUILDINGS

Arkansas

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California

4595. Hill, Andrew P. "Do our rural schools interpret our cultural ideals?" *Nation's Sch* 7:64-9 My '31. plans, il
A discussion of site selection and building planning and construction for small rural schools. Plans for one-teacher schools.

Connecticut

4596. McAlister, R. D. "The new East Street School in Suffield." *Conn Sch* 12:13-15 Ap '31. il
Brief description of a new two-room elementary school planned for expansion to include two more rooms and an auditorium.

Illinois

4597. State of Illinois. *The rural one-teacher schools of Illinois. Buildings and equipment, standardization, daily program, demonstration schools.* State Dept of Pub Instr, Circular no. 234, Springfield, 1929. 96 p

Gives regulations, laws, and recommendations for Illinois schools relative to heating, ventilation, lighting, seating, safety, water supply, and toilets.

Cross-index

4476

Michigan

4598. *American School Board Journal.* "A notable country school." *Am Sch Bd J* 79:62-3 Ag '29. plans, il

Description of a beautiful stone one-teacher building which is a free adaptation of the modern rural English style. The cost of the building was $35,000.

Missouri

4599. *American School Board Journal.* "The Price District School in St. Louis County, Missouri." *Am Sch Bd J* 75:49-51 O '27. plans, il

Story of the planning and construction of the Price District School. Some information about the building is given.

4600. "Two interesting rural schools." *Am Sch Bd J* 81:52, 123 N '30. plans, il

Description of (1) a four-room elementary school at Sappington, Missouri, erected at a cost of $40,000; and (2) a three-room, 100-pupil-capacity, elementary school at Baden, Missouri, erected at a cost of $20,000.

Nebraska

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New York

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4361

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Wisconsin

4601. *American School Board Journal.* "A 'forward Wisconsin' country school." *Am Sch Bd J* 84:88 Ja '32. plans, il

Description of a $6,000 one-room district school at Raymond, Wisconsin.

Not Classified

4602. Challman, Samuel A. "The small rural schoolhouse." *Nat Council on Schoolhouse Construction* (Report of 9th annual meeting) 1931:8-11. ms

The importance of the need for better heating and ventilating, better illumination, more sanitary conditions and less fire hazards in the small rural schoolhouse.

4603. Credle, W. F. "The South and the small schools." *Nat Council on Schoolhouse Construction* (Report of 9th annual meeting) 1931:1-7. mim
The general condition of the small rural schools of the South.

4604. *Nation's Schools.* "Bulletin for remodeling the 'Little Red Schoolhouse' is available." *Nation's Sch* 8:102 Jl '31
Summary of Office of Education bulletin on rural schoolhouses.

4605. Stalker, Francis M. "Education in Indiana—the rural school problem." *Teach Col J* 1:14-16 S '29
Discusses the ideal one-teacher rural school. Building and equipment are considered along with other items.

4606. Stoel, Thomas B. "Improving one-room country school buildings." *N Y State Educ* 18:762-3, 818-20 Ap '31. il
Discusses a number of defects common to rural buildings and suggests methods of correcting these.

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2267 2522

GROUPS OF BUILDINGS REPRESENTATIVE OF CITIES, STATES, AND SECTIONS OF THE COUNTRY

Alabama

4607. *Nation's Schools.* "Elementary-school construction in Birmingham." *Nation's Sch* 1:63-5 Mr '28
A tabulation of costs on seven recent projects in Birmingham.

Arkansas

4608. Hirst, C. M. "School buildings in Arkansas." *Am Sch Bd J* 76:88-9, 94, 96, 98, 101 Ja '28. plans, il
An account of the organization and program of the Division of School Buildings and Grounds of the State Department of Education of Arkansas. Some of its findings are offered.

California

4609. Phillips, Hubert. "The school follows the child." *Survey* 66:493-5, 524-5 S 1 '31
Describes schools in certain sections of California.

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2454

Colorado

4610. Sargent, C. G. "Consolidated schools successfully replace one-room type." *Nation's Sch* 1:23-8 Mr '28. il
Discusses living changes that have come and the fact that the rural school has been last to conform to changes. New consolidated buildings are described.

District of Columbia

4611. Haycock, Robert L. "Washington's new type of buildings for elementary schools." *Sch Life* 14:196-7 Je '29
A discussion of the building program of the national capital and a general description of the buildings.

Illinois

4612. State of Illinois. *Representative Illinois high school buildings: types of modern school building construction and suggestions for the use of directors and boards of education.* State Dept of Pub Instr, Circular no. 214. Springfield, 1927. plans, il

A revision of a circular published in 1921 (listed as no. 2224 of this bibliography), giving illustrations and plans of Illinois high schools and suggestions on the development of the building program.

North Carolina

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2430

Pennsylvania

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2656

The South

4613. DeWitt, Roscoe P. "Peculiarities of school building in the South." *Nat Assn Pub Sch Bus Officials* (Proc of 19th annual meeting) 1930:179-83

Discusses buildings of the South in the light of the influence of climate and of materials available.

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2440

Not Classified

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The following is a list of the bulletins published by the School of Education, Indiana University.

All bulletins which are available at the present time may be secured for fifty cents ($.50) per copy, with the exception of the *Second Revision of the Bibliography of Educational Measurements;* the *Bibliography of School Buildings, Grounds and Equipment—Part I; The Philosophy of Human Relations—Individual and Collective,* and the *Bibliography of School Surveys and of References on School Surveys,* which may be secured for seventy-five cents ($.75) per copy. *The Philosophy of Human Relations—Individual and Collective* and all fifty-cent bulletins of the School of Education may be obtained from the University Bookstore. The other three bulletins should be ordered thru the Bureau of Coöperative Research, Indiana University.

Proceedings of the High School Principals' Conference (November 23 and 24, 1923). Vol. I, No. 1, 1924. 85 p. (Supply exhausted.)

Investigation of Nursing as a Professional Opportunity for Girls. Part I, Technical Study; Part II, Vocational Information Bulletin. By Florence E. Blazier. Vol. I, No. 2, 1924. 69 p.

Proceedings of the Eleventh Conference on Educational Measurements. Vol. I, No. 3, 1925. 141 p.

Proceedings of the High School Principals' Conference (November 14 and 15, 1924). Vol. I, No. 4, 1925. 49 p. (Supply exhausted.)

First Revision of the Bibliography of Educational Measurements. Compiled by the Bureau of Coöperative Research. Vol. I, No. 5, 1925. 147 p. (Supply exhausted.)

Proceedings of the Twelfth Conference on Educational Measurements. Vol. I, No. 6, 1925. 76 p.

The Effect of Population upon Ability to Support Education. By Harold F. Clark. Vol. II, No. 1, 1925. 28 p.

Proceedings of the High School Principals' Conference (November 20 and 21, 1925). Vol. II, No. 2, 1925. 77 p. (Supply exhausted.)

A Cross-Indexed Bibliography on School Budgets. By Harold F. Clark. Vol. II, No. 3, 1926. 66 p.

A Comparison of the Results Made on Certain Standardized Tests by Pupils in the Bloomington High School Who Were Taught in Classes of the Same Grade by University Student Teachers and by Regular High School Teachers. By Carl G. F. Franzén. Vol. II, No. 4, 1926. 19 p.

Proceedings of the Thirteenth Annual Conference on Educational Measurements. Vol. II, No. 5, 1926. 103 p.

When to Issue School Bonds. By Harold Florian Clark and Paul Royalty. Vol. II, No. 6, 1926. 16 p.

Students' Attitude Toward Examinations. By Grover T. Somers. Vol. III, No. 1, 1926. 48 p.

Proceedings of the High School Principals' Conference (November 12 and 13, 1926). Vol. III, No. 2, 1926. 27 p.

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Proceedings of the Fourth Annual Conference on Elementary Supervision. Vol. III, No. 5, 1927. 64 p.

Proceedings of the Fourteenth Annual Conference on Educational Measurements. Vol. III, No. 6, 1927. 66 p.

Some Phases of the Junior College Movement. By I. Owen Foster, Harold F. Clark, Willard W. Patty, and Leo M. Chamberlain. Vol. IV, No. 1, 1927. 125 p. (Supply exhausted.)

Second Revision of the Bibliography of Educational Measurements. By Henry Lester Smith and Wendell William Wright. Vol. IV, No. 2, 1927. 251 p.

Bibliography of School Buildings, Grounds, and Equipment—Part I. By Henry Lester Smith and Leo Martin Chamberlain. Vol. IV, No. 3, 1928. 326 p.

Proceedings of the High School Principals' Conference (November 18 and 19, 1927). Vol. IV, No. 4, 1928. 54 p.

The Economic Effects of Education. By Harold F. Clark. Vol. IV, No. 5, 1928. 39 p.

Proceedings of the Fifteenth Annual Conference on Educational Measurements. Vol. IV, No. 6, 1928. 73 p.

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An Analysis of the Attitudes of American Educators and Others Toward a Program of Education for World Friendship and Understanding. By Henry Lester Smith and Leo Martin Chamberlain. Vol. V, No. 4, 1929. 109 p.

Tentative Program for Teaching World Friendship and Understanding in Teacher Training Institutions and in Public Schools for Children Who Range from Six to Fourteen Years of Age. By Henry Lester Smith and Sherman Gideon Crayton. Vol. V, No. 5, 1929. 54 p.

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Efficiency in College Management. By John Dale Russell. Vol. VII, No. 6, 1931. 143 p.

Bibliography of School Surveys and of References on School Surveys. By Henry Lester Smith and Edgar Alvin O'Dell. Vol. VIII, Nos. 1 and 2, 1931. 212 p.

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